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Title:
Perfect score:
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Maximum Match 100%
Listing first 50 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OM protein -
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tal number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           limum DB seq length: 0
kimum DB seq length: 2000000000
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                                                                                                                                                                                                                                                                                                                                      A_Geneseq_1101:*
1: /SIDS1/gcgdata,
2: /SIDS1/gcgdata,
3: /SIDS1/gcgdata,
4: /SIDS1/gcgdata,
5: /SIDS1/gcgdata,
6: /SIDS1/gcgdata,
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11: /SIDS1/gcgdata,
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| SIDSI/gcgdata/geneseq/geneseqp/AA1980.DAT: *
| SIDSI/gcgdata/geneseq/geneseqp/AA1981.DAT: *
| SIDSI/gcgdata/geneseq/geneseqp/AA1981.DAT: *
| SIDSI/gcgdata/geneseq/geneseqp/AA1982.DAT: *
| SIDSI/gcgdata/geneseq/geneseqp/AA1983.DAT: *
| SIDSI/gcgdata/geneseq/geneseqp/AA1985.DAT: *
| SIDSI/gcgdata/geneseq/geneseqp/AA1986.DAT: *
| SIDSI/gcgdata/geneseq/geneseqp/AA1986.DAT: *
| SIDSI/gcgdata/geneseq/geneseqp/AA1987.DAT: *
| SIDSI/gcgdata/geneseq/geneseqp/AA1989.DAT: *
| SIDSI/gcgdata/geneseq/geneseqp/AA1999.DAT: *
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Gapop 10.0 , Gapext 0.5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GMNLTWYRESK 11
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

12 21 AAY69592	11 21 AAY50882	93.7 22 21 AAY69587	100.0 426 17 AAR97753	417 18 AAW23067	100.0 341 21 AAB06208	100.0 312 21 AAY79995	100.0 124 18 AAW24097	100.0 20 18 AAW24098	100.0 11 21 AAY50879	100.0 11 21 AAY69585	Query Score Match Length DB ID Descript
Canine substituted	Antibody 8H.8 bind	Peptide E3A.5-exte	Canine IgE. Canis	Canine IgE heavy c	Immunogenic peptid	Dog immunoglobulin	Partial canine imm	Canine immunoglobi	8H.8 binding canin	Canine IgE-derived	Description

Result

11:12:17 17 17:17:17		2			c	٥
The same of the sa	100000	٥ <u>ا</u>	108	57 ·	יע טינ	n i
ap120	80	21	96	57.1	36	49
Anti-qp120 antibod	AAY95144	21	96	57.1	3 6	48
VL region of	AAW01292	17	96	57.1	36	47
Anti-HIV gp120 imm	AAR54323	15	96	57.1	36	46
Human MTP. Homo	AAR50007	14	894	8	37	45
Human MTP. Ното	AAR42963	14	894	8	37	44
	AAR42962	14	860	8	37	43
đ	AAU05396	22	26926	0	38	42
	AAW97812	20	526	0.	38	41
Single chain	AAY27111	20	500	0.	38	40
SCT1 single chain	AAW29213	18	500	0	38	39
Vector SCT1-derive	AAR98906	17	500	0	38	38
ion pro	AAB67480	22	494	0	38	37
SSC1 single chain	AAW29212	18	459	0	38	36
Vector SSC1-deriv	AAR98905	17	459	0	38	35 5
SCE1 single chain	AAW29214	18	458	0	38	34
S	AAR98907	17	458	0.	38	33
	AAW10513	18	448	0	38	32
ble f	AAW10507	18	441	60.3	38	31
s II é	AAB58696	22	256	0.	38	30
SII	AAY52935	21	256	0.	38	29
II S	AAY68281	21	256	٥.	3 8	28
	AAW10509	18	234	0	38	27
	AAW10508	18	196	0.	38	26
lalpha2	AAW10505	18	196	0	38	25
Gene 47 related pe	AAB60775	22	193	0	38	24
Bovine butyro	AAW97813	20	130	0.	38	23
Human anti-Rh(D) c	AAG93603	22	107	٥.	36	22
Platypus IgE	AAB06204	21	343	ω	40	21
Antibody 8H.8	AAY50881	21	11	ω.	40	20
Feline IgE-derived	AAY69591	21	11	ω.	40	19
Activated leukocy	AAW47088	19	583	5	41	18
Stem cell marker	AAR97230	17	583	5	41	17
Human activated	AAW06891	17	583	5	41	16
Human lung tumour	AAB76858	22	582	65.1	41	15
Amino acid sequenc	AAY93969	21	574	65.1	41	14
B15R product.	AAR41542	14	351	5	41	13

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RESULT 1
AAY6951
ID AAY6951
XX AAY6951
XX ID-APR
XX ID-APR
XX IMMUNO
KW Allerg
XX IMMUNO
KW Allerg
XX IMMUNO
XX EP9553:
XX EP9553:
XX O9-APR
XX O10EX-
XX ILAWton
XX IMMUNI; 2
                                                                                                                                                                                                                      Immunogenic; autoimmunity; IgE autoantibody; immunoglobulin
allergy; canine; prophylaxis; treatment.
    WPI; 2000-118182/11
                            Lawton R,
                                                                                09-APR-1998;
30-MAR-1999;
                                                                                                                     09-APR-1999;
                                                                                                                                              10-NOV-1999
                                                                                                                                                                       EP955311-A2
                                                                                                                                                                                                 Canis familiaris.
                                                                                                                                                                                                                                                                Canine IgE-derived peptide E3a.5, SEQ ID NO:10.
                                                                                                                                                                                                                                                                                       19-APR-2000 (first entry)
                                                                                                                                                                                                                                                                                                                   AAY69585;
                                                                                                                                                                                                                                                                                                                                           AAY69585 standard; peptide; 11 AA.
                                                     (IDEX-) IDEXX LAB INC
                            Mermer B,
                                                                             98US-0058332.
99US-0281761.
                                                                                                                     99EP-0107020
                             Francoeur G;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequences AAY69576-Y69586 and AAY69598-Y69599 represent peptides that may Co be used to induce anti-IgE (immunoglobulin E) autoantibodies in a dog. CI IgE is an important mediator of canine allergic responses, including Type CI Immediate hypersensitivity. It is estimated that up to 30% of all dogs common canine allergies or allergy-related skin disorders, and allergic content of the most frequent. Once IgE has been released in response to being the most frequent. Once IgE has been released in response to CI allergen, the IgE binds to receptors on mast cells. The IgE molecules CI can then become cross-linked, which induces the mast cells to release CI histamine, which leads to the manifestation of allergic or conservative variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE conservative variation corresponde to appropriation of allergic response even in the absence of allergen. Anti-IgE autoantibody induction results in a immune creative variation of allergic are the tracest and accessing B cell which would exaces the IgE production by B cells and/or targetting conservation. The peptides 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                       WPI; 2000-040833/04.
                                                                                 Lawton R, Mermer B,
                                                                                                                                                                       09-APR-1998;
30-MAR-1999;
                                                                                                                                                                                                                                        09-APR-1999;
                                                                                                                                                                                                                                                                                     17-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Canine; allergy; antibody 8H.8; IgE; B cell; mast cell; anti-allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8H.8 binding canine mimotope 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24-FEB-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY50879;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY50879 standard; peptide; 11 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 5; Page 5; 38pp; English.
                                                                                                                          (IDEX-) IDEXX LAB INC.
                                                                                                                                                                                                                                                                                                                            EP957111-A2
                                                                                                                                                                                                                                                                                                                                                                                                                epitope; prophylaxis; treatment; mimotope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New peptides, useful for generating canine autoantibodies against immunoglobulin {\tt E} (IgE) to treat allergic symptoms -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Match 100.0%; Local Similarity 100.0%; es 11; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 gmnltwyresk 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11 AA;
                                                                                                                                                                       98US-0058331
99US-0281760.
                                                                                                                                                                                                                                        99EP-0107035
                                                                                   Francoeur G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             pred. No. 7.9
Mismatches
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Binding proteins used for treatment or prophylaxis of canine allergy

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Best Local Similarity
Matches 11; Conserv
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Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This invention describes a novel binding protein which specifically binds to native canine free or B-cell bound IgE, and which doesn't bind to IgE when the IgE is bound to mast cells. THe peptide products of the invention have anti-allergic activity. The antibodies bind to defined epitopes on free or B-cell bound IgE molecules which have an important role in allergic reaction. The specific binding proteins are used to produce a pharmaceutical composition, preferably with a diluent, which can be used for prophylaxis or treatment of canine allergy.

ANY50876-Y50900 represent peptide mimotopes used in the method of the
                                                                                                                                                   AAW24098-106 are peptide fragments containing at least 5 continuous amino acids of the partial canine immunoglobulin E (IgE) protein shown in AAW24097. The peptides are used for the preparation of anti-canine IgE antibody. The anti-canine IgE antibody can be used for the diagnosis of canine allergies.
                                                                                                                      Sequence
                                                                                                                                                                                                                                             Claim 2; Page 9; 12pp; Japanese.
                                                                                                                                                                                                                                                                          Canine immunoglobulin E peptide fragment and related DNA - useful for the preparation of anti-canine immunoglobulin E antibody
                                                                                                                                                                                                                                                                                                                                                                                                  22-DEC-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                22-DEC-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Immunoglobulin E; IgE; anti-canine IgE antibody; allergy; canine; dog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Canine immunoglobin E peptide 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-NOV-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAW24098 standard; peptide; 20 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
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                                                                                                                                                                                                                                                                                                                         N-PSDB; AAT85647.
                                                                                                                                                                                                                                                                                                                                        WPI; 1997-389423/36.
                                                                                                                                                                                                                                                                                                                                                                     (HITB ) HITACHI CHEM CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JUN-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAW24098;
1 GMNLTWYRESK 11
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les 11; Conserv
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                                                                                                                        20 AA;
                                             Conservative
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                                             100.0%; Score 63; DB 18;
100.0%; Pred. No. 0.00015;
tive 0; Mismatches 0;
                                                                          Length 20;
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                                               Indels
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                                             0;
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RESULT
AAW24097
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XX AAWX
AC AAWX
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XX INMUN
DE PAIT
XX INMUN
XX Cani
XX Cani
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Best Local S
Matches 11
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                                                                        Immunoglobulin B: IgB; epsilon heavy chain; antigenic; antigen; immunogenic; immunostimulatory; carrier protein; helper T cell epitope; antibody; allergy; allergic disease; immunisation; anti-allergic; anti-anaphylactic; anti-asthmatic; asthma; anaphylaxis; dermatitis.
                                                                                                                                                                                                                                                                                                                                                                                                                 of this sequence are used antibody. The anti-camine canine allergies.
                                                                                                                                                                                                                                                                                                                                                                                                                             This is a partial canine immunoglobulin E (IgE) protein. Peptide fragments (AAW24098-106) containing at least five continuous amino acids of this sequence are used for the preparation of anti-canine IgE antibody. The anti-canine IgE antibody can be used for the diagnosis of
                                                 Canis sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Page 8; 12pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Canine immunoglobulin E peptide fragment and related DNA - useful for the preparation of anti-canine immunoglobulin E antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Canis familiaris
                                                                                                                                      Dog immunoglobulin E epsilon heavy chain SEQ ID
                                                                                                                                                                 15-MAY-2000
                                                                                                                                                                                         AAY79995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW24097;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW24097 standard; peptide;
    29-DEC-1999.
                          W09967293-A1
                                                                                                                                                                                                               AAY79995 standard; Protein; 312 AA.
                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (HITB ) HITACHI CHEM CO LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22-DEC-1995;
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                                                                                                                                                                                                                                                                             gmnltwyresk 23
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                                                                                                                                                                                                                                                                                                                                                                                           124 AA;
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0.0011;
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RESULT AABO 2018 ID AABO 2018 AC AABO XX AABO XX Dog; KW asth OS Chim OS Chim OS Chim OS Chim OS Chim PN WO2( XX WO2( 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antigenic peptides (1) (1) have anti-allergic, anti-anaphylactic CC and anti-asthmatic properties. (1) induces polyclonal antibodies compenies for a target effector site on the epsilon-heavy chain of IgE, CC and so preventing triggering and activation of mast cells and basophils CC and downregulation of IgE synthesis. Conjugates, or fusion peptides, CC containing (1) are used for active immunisation against IgE-mediated CC containing (1) are used for active immunisation against IgE-mediated CC allergies, e.g. food allergies, asthma, anaphylaxis, or flea-allergy CC dermatitis. Nucleic acids that encode these compounds are useful for CC conjugates of (1) that include a promiscous The lager cell epitope (1) that include a promiscous The lager cell epitope (functional in genetically diverse subjects), in addition to a B cell CC constraints (disalifide bridge) to stabilise conformational features and CC maximize cross-reactivity to the natural target. They induce safe (non-anaphylactogenic) antibodies. AAV79994 to AAV80084 represent amino CC acid sequences used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100
Best Local Similarity 100
Matches 11; Conservative
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                                                                                                                                                                                                                                                                                                                                                                    Chimeric - Didelphis virginiana Chimeric - Canis sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-160578/14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UNBI-) UNITED BIOMEDICAL INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-JUN-1998;
                                   (RESI-) RESISTENTIA PHARM AB
                                                                                                                                                                                                                                                                                                         WO200025722-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAB06208;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB06208 standard; protein; 341 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-JUN-1999;
                                                                                             02-NOV-1998;
22-SEP-1999;
                                                                                                                                                                                     21-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Immunogenic peptide consisting of opossum CH2, dog CH3 and opossum CH4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Page 66-68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   143 gmnltwyresk 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GMNLTWYRESK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               present invention describes immunoglobulin E (IgE)-CH3 domain
igenic peptides (I). (I) have anti-allergic, anti-anaphylactic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antigenic peptide from the CH3 domain immunization against allergy \, -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        opossum; immunoglobulin E; IgE; na; eczema; immunogenic peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Walfield AM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                             98US-0106652
99US-0401636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-0100287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US13959
                                                                                                                                                                                     99WO-SE01896
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 63; DB 21;
Pred. No. 0.0031;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        vaccination; infection; allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             immunoglobulin E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 312;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             fusions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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RESULT
AAW23067
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Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                              /note= "encoded by TAC" Misc-difference 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence is an immunogenic peptide consisting of the heavy chain constant regions 2 and 4 of the opossum IgE and the heavy chain constant region 3 from the dog. It was shown to cause a stronger polyclonal anti-self IgE response than peptides consisting of the same regions from one mammal. Immunogenic peptides, particularly those consisting of different heavy chain constant regions, can be used for vaccination in humans, against bacterial and viral infections and allergies, such as asthma, fur, pollen and food allergies and eczema.
       14-FEB-1996;
                                                                                                                                                    Misc-difference 204
                                                                                                                                                                 /note=
Misc-difference 203
                                                                                                                                                                                                         /note-
Misc-difference 176
                                                                                                                                                                                                                                                                                           /note-
Misc-difference 83
                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                      14-FEB-1997;
                                                                                                                                                                                                                                                                            Misc-difference 174
                                                                                                                                                                                                                                                                                                                                                                       Misc-difference 56
                                                                                                    WO9730156-A2
                                                                                                                                                                                                                                               Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Canine IgE heavy chain constant region (exon 1-4 product).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-FEB-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAW23067;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW23067 standard; Protein; 417 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Fig 2; 50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2000-365342/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hellman LT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 lmmunomodulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 162 gmnltwyresk 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Immunogenic polypeptides useful for preventing the harmful effects of \operatorname{Immunoglobulin} E in mammals -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 GMNLTWYRESK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            immunoglobulin; antibody; heavy chain constant region typersensitivity; therapy; dog; antisense;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            341 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%;
ilarity 100.0%;
Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
       96US-0601197
                                      97WO-US02322
                                                                                                                                                                                                                                               /note-
175
                                                                                                                                   /note=
                                                                                                                                                                                                                                                                                                                                                                                      'note= "encoded by ACC"
                                                                                                                                 "encoded by GAC"
                                                                                                                                                                                              "encoded by TGN"
                                                                                                                                                                                                                            "encoded by NNG"
                                                                                                                                                                                                                                                            "encoded by GGN"
                                                                                                                                                                                                                                                                                       "encoded by NNT"
                                                                                                                                                                                                                                                                                                                       "encoded by GCC"
                                                                                                                                                               "encoded by TCC"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
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       B
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
The canine IgE amino acid sequence (AAR97753) was deduced from an isolated gene (AAT29824) obtd. from a canine liver DNA library. The cloning of the IgE gene allows prodn. of large quantities of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This polypeptide is encoded by exons 1-4 (see AAT79278) of canine IgE heavy chain constant region (epsilon) genomic DNA. Another polypeptide, comprising the exon 5 and 6 product, is given in AAW23068. Recombinant peptides encoded by exons 1-6 can be produced in eukaryotic or prokaryotic cells. Such peptides, and antibodies raised against them, are used in methods to treat the manifestation of allergy in dogs, e.g. to treatment Type I immediate hypersensitivity, and for immunomodulation.
                                                               Claim 11; Page 29-30; 49pp; English.
                                                                                                                                                                                             Hollis GF,
                                                                                                                                                                                                                                                            09-NOV-1994;
                                                                                                                                                                                                                                                                       09-NOV-1994;
                                                                                                                                                                                                                                                                                                        03-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                   WO9614867-A1
                                                                                                                                                                                                                                                                                                                                                                                                 Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Canine IgE.
                                                                                              New DNA encoding canine IgE and IgA - useful in vaccines, antisense therapy, assays, drug screening, etc.
                                                                                                                                              N-PSDB; AAT29824.
                                                                                                                                                             WPI; 1996-277321/28.
                                                                                                                                                                                                                                                                                                                                      23-MAY-1996
                                                                                                                                                                                                                                                                                                                                                                                                                               IgE; immunoglobulin; antibody; vaccine; allergy; hypersensitivity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-AUG-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR97753;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                            (MERI ) MERCK & CO INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 35-39; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAR97753 standard; Protein; 426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Isolated canine IgE heavy chain constant region DNA - useful to
develop products for treatment of canine allergies and for
immunomodulation in dogs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-PSDB; AAT79278
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240 gmnltwyresk 250
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              417 AA;
                                                                                                                                                                                             Patel MD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
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94US-0336583
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
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Pred. No. 0.0043;
Mismatches 0;
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В Š

Length 417; Indels

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
dogs suffer from allergies or allergy-related skin disorders, and allergic dermatitis is thought to affect between 3 and 15% of dogs. Common canine allergens include fleas, pollens, moulds and dust, with flea allergy being the most frequent. Once IgE has been released in response to allergen, the IgE binds to receptors on mast cells. The IgE molecules can then become cross-linked, which induces the mast cells to release histamine, which leads to the manifestation of allergic symptoms. The peptides of the invention correspond to epitopes of canine IgE, or conservative variations thereof, that are accessible in circulating IgE but not in IgE bound to mast cells. The autoantibodies produced on immunisation with such peptides therefore target only circulating IgE, avoiding the possibility that they may cross-link bound IgE molecules, which would exacerbate an ongoing allergic response even in the absence of allergen. Anti-IgE autoantibody induction results in an immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    recombinant IgE using bacterial, yeast, mammalian, insect or viral systems. The IgE can be used in drug development (e.g. small molecule screening, assay development and anti-IgE antibody generation). Fragments of IgE can be used in vaccines or to prevent IgE-mediated hypersensitivity. The new sequence information permits targeted modulation of IgE-mediated immune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-APR-1998;
30-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                                                          Example 1; Page 16; 38pp; English
                                                                                                                                                                                                                                                                                                                                                                                           New peptides, useful for generating canine autoantibodies against
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lawton R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (IDEX-) IDEXX LAB INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        allergy; canine; prophylaxis; treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY69587 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Peptide E3A.5-extended,
                                                                                                                                                                                                                                                                                                                                                                              immunoglobulin E (IgE) to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mmunogenic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GMNLTWYRESK 11
                                                                                                                                                                                                                                                    be used to induce anti-IgE (immunoglobulin E) autoantibodies in a . IgE is an important mediator of canine allergic responses, include I immediate hypersensitivity. It is estimated that up to 30% of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ø
                                                                                                                                                                                                                                                                                                       invention relates to peptides (AAY69576-Y69586, AAY69598-Y69599) that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gmnltwyresk 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mermer B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   426 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         autoimmunity; IgE autoantibody; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98US-0058332
99US-0281761
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Francoeur
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ
                                                                                                                                                                                                                                                                                                                                                                              treat allergic symptoms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ID NO:12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 63;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0.0044;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 426;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (F)
                                                                                                                                                                                                                                                    including
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RESULT 10
AAY50882
ID AAY508
XX AAY508
XX AAY508
XX Canin
XX epitc
XX Ep95
XX Syntl
XX Ep95
XX Syntl
XX D9-1
PN EP95
XX O9-1
PR 09-1
PR 09-1
XX D9-1
PR WPI
XX X ID
XX I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                         This invention describes a novel binding protein which specifically binds to native canine free or B-cell bound IgE, and which doesn't bind to IgE when the IgE is bound to mast cells. THe peptide products of the invention have anti-allergic activity. The antibodies bind to defined epitopes on free or B-cell bound IgE molecules which have an important role in allergic reaction. The specific binding proteins are used to produce a pharmaceutical composition, preferably with a diluent, which can be used for prophylaxis or treatment of canine allergy.

ARY50876-Y50900 represent peptide mimotopes used in the method of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      response that targets the IgE-expressing B cell, which affects IgE synthesis by downregulating IgE production by B cells and/or targetting the IgE-producing B cell for destruction. The peptides of the invention are therefore useful for the treatment or prophylaxis of allergic symptoms in a dog. Sequences AAY69587-Y69588 represent peptides used in exemplifications of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Canine; allergy; antibody 8H.8; epitope; prophylaxis; treatment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2000-040833/04.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-APR-1998;
30-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antibody 8H.8 binding substituted canine mimotope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY50882 standard; peptide; 11 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                     Example
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lawton R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (IDEX-) IDEXX LAB INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-FEB-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity es 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GMNLTWYRESK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gmnltwyrese
                                                                                                                                                                                                                                                                                                                                                                                                                     2; Page 13; 30pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 proteins used for treatment or prophylaxis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mermer B,
         11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AA;
      AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9905-0281760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0058331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99EP-0107035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         93.78;
90.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Francoeur
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       treatment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 59; DB 21; L
Pred. No. 0.00084;
Pred. No. 0.00084;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IgE; B ce;
; mimotope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B cell; mast cell; anti-allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 canine allergy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22;
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Qy

1 GMNLTWYRESK

Query Match
Best Local Similarity
Matches 10; Conserv

Conservative

85.7%; 90.9%;

Score 54; I Pred. No. 0. Mismatches

DB 21; 0.0029;

Length 11;

0;

Gaps

0,

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RESULT :
                                                                    The invention relates to peptides (AAY69576-Y69586, AAY69598-Y69599) that CC may be used to induce anti-IgE (immunoglobulin E) autcoantibodies in a CC dog. IgE is an important mediator of canine allergic responses, including Type I immediate hypersensitivity. It is estimated that up to 30% of all CC dogs suffer from allergies or allergy related skin disorders, and callergy ted dermetitls is thought to affect between 3 and 15% of dogs. CC Common canine allergens include fleas, pollens, moulds and dust, with CC flea allergy being the most frequent. Once IgE has been released in CC response to allergen, the IgE binds to receptors on mast cells. The IgE molecules can then become cross-linked, which induces the mast cells to CC release histemine, which leads to the manifestation of allergic symptoms. CC The peptides of the invention correspond to epitopes of canine IgE, or CC conservative variations thereof, that are accessible in circulating IgE but not in IgE bound to mast cells. The autoantibodies produced on immunisation with such peptides therefore target only circulating IgE, CC avoiding the possibility that they may cross-link bound IgE molecules. CC which would exacerbate an ongoing allergic response even in the absence of allergen. Anti-IgE autoantibody induction results in an immune cresponse that targets the IgE-expressing B cell, which affects IgE synthesis by downregulating IgE production by B cells and/or targetting CC synthesis by downregulating IgE production. The peptides of the invention CC are therefore useful for the treatment or prophylaxis of allergic compared with peptide AAY69584 in binding studies with the anti-canine CC Invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-APR-1998;
30-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EP955311-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Canis familiaris.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Canine substituted IgE-derived peptide, SEQ ID NO:17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-APR-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY69592;
                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                             (IDEX-) IDEXX LAB INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    treatment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAY69592 standard; peptide; 12 AA
                                                                                                                                                                                                                                                                                                                                                                                                                        Example 6; Page 19; 38pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2000-118182/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IGE; immunoglobulin E; allergy; canine; mutant; mutein; prophylaxis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11
           Local Similarity
les 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gmnltwsresk 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mermer B,
                                                                     12 AA;
           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99US-0281761.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99EP-0107020.
                   69.0%; Score 43.5; DB 21; Length 12; 83.3%; Pred. No. 0.22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Francoeur G;
           0;
           Mismatches
           1;
           Indels
           1,
        Gaps
           ۲.
                                   밁
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                                   Sequence
                                                                                                                                                                                         Disclosure; Fig 1C; 73pp; English.
                                                                                                                                                                                                                                                                                          Smith GL;
                                                                                                                                                                                                                                                                                                                                                                                       14-MAY-1992.
                                                                                                                                                                                                                                                                                                                                                                                                              WO9207944-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disulfide-bond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disulfide-bond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disulfide-bond
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human vaccinia virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          multiple pathogens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Vaccinia virus B18R protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-NOV-1992 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR24251;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR24251 standard; Protein; 351 AA.
                                                                                                                                                                                                                                                      N-PSDB; AAQ25097.
                                                                                                                                                                                                                                                                  WPI; 1992-183679/22.
                                                                                                                                                                                                                                                                                                                (LYNX-) LYNXVALE LTD.
                                                                                                                                                                                                                                                                                                                                       26-OCT-1990;
                                                                                                                                                                                                                                                                                                                                                               28-OCT-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Recombinant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GMNLTW-YRESK 11
                                   351 AA;
                                                                                                                                                                                                                                                                                                                                        90GB-0023352.
                                                                                                                                                                                                                                                                                                                                                               91WO-GB01882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note=
172..2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note=
272..3
                                                                                                                                                                                                                                                                                                                                                                                                                                                /note=
321.,32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note=
251..2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note=
117..13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers 73..129
                                                                                                                                                                                                                                                                                                                                                                                                                                                   , 323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        . 271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            . 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        174
65.1%;
Score
 41;
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The sequence is that of the vaccinia virus B18R protein which is involved in the binding of interleukin (II)-2 and/or II-6 which is involved them from reaching their natural receptors, hence the inflammatory response is diminished and viral replication is enhanced. Its gene sequence may be inactivated or all or part of it deleted to allow greater attenuation of the virus, enhanced immunogenicity of the recombinant vaccinia virus and/or provide sites for the insertion of heterologous genes. This recombinant vaccinia virus may be used as a live vaccine in both human and veterinary medicine. See also AAR24250 and AAR24252.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New vaccinia vector genes and expression products - useful in diagnosis and treatment of inflammatory conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        polyvalent vaccine; interleukin binding; IL-2; IL-6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "N-linked carbohydrate addition site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "intradomain disulphide bridge"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "N-linked carbohydrate addition site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "N-linked carbohydrate addition site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "intradomain disulphide bridge"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "N-linked carbohydrate addition site"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "intradomain disulphide bridge"
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DB 13;

Length 351;

55.6%;

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RESULT 1
AAR41542
ID AAR4
XX AAR4
AC AAR4
XC AAR4
XX B15F
 CCC XXX
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Matches
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The sequence (AAQ46243) encodes a protein that specifically binds to IL-1-beta and can be used to block the activity of IL-1-beta and treat
                                                                                                  WPI; 1993-303467/38
N-PSDB; AAQ46244.
                                                                                                                                    Smith GL;
                                                                                                                                                                                05-MAR-1992;
                                                                                                                                                                                                    05-MAR-1993;
                                                                                                                                                                                                                                                 W09318153-A.
                                                                                                                                                                                                                                                                                                        Disulfide-bond
                                                                                                                                                                                                                                                                                                                              Modified-site
                                                                                                                                                                                                                                                                                                                                                    Disulfide-bond
                                                                                                                                                                                                                                                                                                                                                                         Disulfide-bond
                                                                                                                                                                                                                                                                                                                                                                                                 Disulfide-bond
                                                                                                                                                                                                                                                                                                                                                                                                                      Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                            Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vaccinia virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B15R product
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR41542;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR41542 standard; Protein;
                                Disclosure; Fig 1C; 91pp; English
                                                                 New vaccinia virus B15R nucleotide sequence - used prods, to treat conditions with interleukin-I beta
                                                                                                                                                         (SMIT/) SMITH G
                                                                                                                                                                                                                            16-SEP-1993.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              182 nitwykdnk 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NLTWYRESK 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                92GB-0004780
                                                                                                                                                                                                      93WO-GB00460
                                                                                                                                                                                                                                                                                                                                                                           /label=
129
                                                                                                                                                                                                                                                                                                                                                    /label= possible_linking_site
172
                                                                                                                                                                                                                                                                                                                               /label= possible_linking_site
                                                                                                                                                                                                                                                                                                                                                                                                                                          /label= possible_N-linked_carbohydrate_site 269...271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /label= possible_sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 261..263
                                                                                                                                                                                                                                                                       /label= possible_linking_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                         /label=
                                                                                                                                                                                                                                                                                            'label= possible_linking_site
                                                                                                                                                                                                                                                                                                                   'label=
                                                                                                                                                                                                                                                                                                                                                                                                                               label possible_N-linked_carbohydrate_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           label = possible_N-linked_carbohydrate_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  label-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      el- possible_N~linked_carbohydrate_site
.186
                                                                                                                                                                                                                                                                                                                                                                                                           possible_N-linked_carbohydrate_site
                                                                                                                                                                                                                                                                                                                  possible_linking_site
                                                                                                                                                                                                                                                                                                                                                                                    possible_linking_site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. 24;
4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                  to prepare mediated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     bowel disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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Query Match
Best Local Similarity
""" 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                      CC The present sequence represents rat antigen Ag2117. The antigen is CC representative of pancreatic cell lines. The antibody that recognises CC Ag2117 was identified using the method of the invention. The Specification describes a method for immunizing a host mammal to produce CC appulation of monoclonal antibodies that bind to antigens CC representative of a specific cell type that are heterologous to the CC and viable cells with surfaces which are free of serum. The methods CC are useful for producing populations of antibodies that bind to antigens CC are useful for producing populations of antibodies that bind to antigens CC are tissue-selective, sub-tissue selective or cell-type specific. These CC antibodies facilitate the identification of novel antigens and the CC are the antibodies or hybridomas produced using the methods have CC delineation of the combination of surface antigens on a specific cells CC type. The antibodies or hybridomas produced using the methods have CC diagnostic and therapeutic applications.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       II-1-beta mediated conditions. The sequence can also be used as part of a kit to detect and mesure II-1B. The sequence (AAQ46244) encodes similar protein and recombinant vvs in which expression of B15R and B18R is inactivated. To introduce restriction sites close to the initiator methionine of B15R, a PCR copy of the 5' region of the ORF was constructed using primers (AAQ46241-42).
                                                                                                                                                                                                                                                                                                                  Immunizing a host mammal to produce population of monoclonal antibodies that bind to antigens of specific cell type comprises introducing viable cells with serum-free surfaces -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antigen; Ag2117; pancreatic cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Amino acid sequence of a partial rat antigen Ag2117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY93969 standard; Protein; 574 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                   N-PSDB; AAA57480
                                                                                                                                                                                                                                                                                                                                                                                                                                   Mather JP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200037503-A1
                                                                                                                                                                                                                                                                                      Example 10; Fig 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (RAVE-) RAVEN BIOTECHNOLOGIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   182 nitwykdnk 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             351
                                                                                                                                                                                                                                                                                                                                                                                                                                   Bald LN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11
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                                                                                                                                                                                                                                                                                     61pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                55.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Roberts PR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4;
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Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          monoclonal antibody;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41;
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Stephan JF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          surface antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
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574

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The present invention describes immunogenic portions of lung tumour-
CC associated proteins (I) and the nucleic acids (NAs) that encode them.
CC (I) have cytostatic activity and can be used in gene therapy, antisense
CC inhibition and in vaccines. The NAs and the lung tumour associated
CC inhibition and in vaccines. The NAs and the lung tumour associated
CC diagnosis of diseases associated with their inappropriate expression,
CC especially lung cancers. For example, the NAs may be administered to
CC treat diseases by rectifying mutations or deletions in a patient's genome
CC treat diseases by rectifying mutations or deletions in a patient's genome
CC treat diseases by rectifying mutations or deletions in a patient's genome
CC to supplement the patients own production of (I). Additionally, the
CC NAS may be used to produce the lung-tumour associated protein according
CC to standard recombinant DNA methodology. Conversely, antisense NA
CC molecules may be administered to down regulate protein expression by
CC binding with the cells own genes and preventing their expression. The NA
CC and complementary sequences may also be used as DNA probes in diagnostic
CC assays to detect and quantitate the presence of similar NA sequences in
CC cancer. The (I) may be used as antigens in the production of antibodies
CC and. in assays to identify modulators (agonists and antagonists) of the
CC expression and activity of the protein. AAF68083 to AAF68078 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
6; Conserva
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15-OCT-1999;
17-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; lung cancer; lung tumour; lung tumour protein; gene therapy; lung cancer antigen; lung tumour-specific antigen; diagnosis; vaccine; cytostatic; antisense inhibition.
                                                                                                                                                                                                                                                                                                                                                                               Example 1; Page 262-264; 436pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-071488/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wang T, Bar
Retter MW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-DEC-1999; 99US-0476300.

06-MAR-2000; 2000US-0519642.

22-MAR-2000; 2000US-0539077.

10-APR-2000; 2000US-0546259.

27-APR-2000; 2000US-0560406.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human lung tumour protein related protein sequence SEQ ID NO:334.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-APR-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB76858;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB76858 standard; Protein; 582 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CORI-) CORIXA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JUN-2000; 2000WO-US18061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |:|||| |
| 167 nitwyrngk 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15
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                                                                                                                                                                                                                                                                                                                                                                                                               tumor-associated proteins and the nucleic ul for preventing, diagnosing and treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bangur CS, I
Wannion J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-0346492.
99US-0419356.
99US-0466867.
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66.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lodes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       , PM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 41; DB 21; Length 574; Pred. No. 41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fanger GR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vedvick TS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2;
                                                                                                                                                                                                                                                                                                                                                                                                                 acids that
lung cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Carter
                                                                                                                                                                                                                                                                                                                                                                                                                     encode them,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
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AAW06891
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AhB76848 to AhB76878 represent human lung tumour protein related nucleotide and protein sequences which are used in the exemplification of the present invention.
                                                                                                  Modified-site
                                                                                                                                                                                                                       Misc-difference
                                                                                                                                                                                                                                                                                                                                                  Misc-difference 258
                                                                                                                                                                                                                                                                                                                                                                                                  Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Domain
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Кеу
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Activated luekocyte-cell adhesion molecule; ALCAM; CD6 ligand; thymic epithelial cell; inflammation; allograft rejection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human activated leukocyte-cell adhesion molecule ALCAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-MAR-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAW06891;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAW06891 standard; Protein; 583 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                             Modified-site
                                                                                                                                                    Modified-site
                                                                                                                                                                                                                                                                             Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 166 nitwyrngk 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 NLTWYRESK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           582 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                /note-
95
                                                                                                                                                                                                                                                                                                                                                                                                  /note-
                                             /label= Glycosylation
/note= "putative N-glycosylation site"
361
                                                                                                                                                                                                                       /note= "putative N-glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /label
                                                                                                                                                                                                                                                                             265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                               /label= Glycosylation
                                                                                                          /label= Glycosylation
/note= "putative N-glycosylation site"
                                                                                                                                                                                                        /label= Met, Thr
                                                                                                                                                                                                                                                            /label= Glycosylation
                                                                                                                                                                                                                                                                                                                                                                   /note=
                                                                                                                                                                                                                                                                                                                                                                                 /label= Glycosylation
                                                                                                                                                                                                                                                                                                                                                                                                                   /label- Glycosylation
/note- "putative N-glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /label= Glycosylation
/note= "putative N-glycosylation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /label= Extracellular_domain can be subdivid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /label= Sig_peptide
                                                                                                                                                                                                                                                                                                                               /label= Asn,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /label= Extracellular_domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /label= Mat_protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      65.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . 551
                                                                                                                                                                                                                                                                                            "variation owing to polymorphism in HL60 and T-cell derived clones"
                                                                                                                                                                     "variation owing to polymorphism and T-cell derived clones"
                                                                                                                                                                                                                                                                                                                                                               "putative N-glycosylation site"
          "putative N-glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Transmembrane_domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 41; DB 22;
Pred. No. 42;
1; Mismatches 2
                                                                                                                                                                                                                                                                                                                               Ser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 582;
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                                                                                                                                                                                       HL60
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AAR97230
ID AARC
XX
AC AARS
AC AARS
AC Sten
DT 08-C
XX
Sten
XX
Sten
XX
KW Sten
XW HCAI
XX
OS HOM
XX
PN EP7:
                                                                                                                                                                                                                                                                                                                SQ CCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                             RESULT
                                                                                                                                                                                                                                        Query Match
Best Local Similarity bo...
"""+" bes 6; Conservative
                                                                                                                                                                                                                                                                                                                                 Human activated leukocyte cell adhesion molecule (AAW06891) or ALCAM is a CD6 ligand present on the surface of thymic epithelial cells, monocytes, activated T-cells, and other cells. Its amino acid sequence was deduced from cDNA clones (AAT46075) obtd. from HL60 and T-cell lines. ALCAM polypeptides can be produced, e.g. as a fusion proteins, in transformed host cells. They are useful for inhibiting CD6/CD6 interactions between cells and to screen for agents that modulate this interaction. Inhibitors can be used to treat e.g. inflammation, multiple sclerosis, inflammatory uveitis, rheumatoid arthritis, T-cell mediated vasculitis syndromes, organ allograft rejection and neurodegenerative diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CD6 ligands present on surface of thymic epithelial cells - used develop prods. for treating e.g. inflammation, organ allograft rejection or neuro:degenerative diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-NOV-1996
                                                     Stem cell marker; haematopoietic cell antigen; HCA; HCASeq.1; \operatorname{HCAPro.1.}
                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aruffo A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-APR-1996;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Modified-site
            EP716146-A2
                                 Homo sapiens
                                                                                      Stem cell marker HCAPro.1.
                                                                                                            08-0CT-1996
                                                                                                                                                      AAR97230 standard; Protein; 583 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 4; Fig 29; 112pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-PSDB; AAT46075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (BRIM ) BRISTOL-MYERS SQUIBB CO (UYDU-) UNIV DUKE.
                                                                                                                                                                                                             167 nitwyrngk 175
                                                                                                                                                                             17
                                                                                                                                                                                                                                    3 NLTWYRESK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1996-506097/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bowen MA,
                                                                                                                                                                                                                                                                                                                583
                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                AΑ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             950S-0432016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96WO-US06010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /label= Glycosylation
/note~ "putative N-gklycosylation site"
499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /label= Glycosylation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note≈
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /label= Glycosylation
                                                                                                                                                                                                                                                                    65.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Haynes BF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "putative N-glycosylation site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "putative N-glycosylation site"
                                                                                                                                                                                                                                                         1;
                                                                                                                                                                                                                                                          Score 41; DB Pred. No. 42; 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Marquardt H,
                                                                                                                                                                                                                                                                  DB
42;
                                                                                                                                                                                                                                                                               17;
                                                                                                                                                                                                                                                         ν,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Patel D;
                                                                                                                                                                                                                                                                               Length 583;
                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  to
                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                 Db
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RESULT 1
AAW47088
ID AAW4
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
"a+ches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HCAPro.1 (AAR97230) and HCAPro.2 (AAR97231) are novel human haematopoietic cell antigens associated with stem cells. They are the respective products of nucleic acid sequences HCASeq.1 (AAT28819) and HCASeq.2 (AAT28820) obtd. from human CD34+ bone marrow. Expression systems are provided for production of recombinant HCA proteins. The proteins are useful as stem cell marker proteins in functional studies, and can also be used to produce antibodies that allow the purification of stem cells from haematopoietic and other sources.
                                                                                          Domain
                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                    antibody; human.
                                                                                                                                                                                                                                                                                                           Activated leukocyte-cell adhesion molecule (ALCAM).
                                                                                                                                                                                                                                                                                                                                      20-JUL-1998
                                                                                                                                                                                                                                                                                                                                                               AAW47088;
                                                                                                                                                                                                                                                                                                                                                                                         AAW47088 standard; Protein; 583 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 8; Fig 4A; 17pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA encoding human haematopoietic cell antigen proteins - useful stem cell marker proteins in functional studies and for antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gearing D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           02-FEB-1995;
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              Modified-site
                                       Modified-site
                                                                Modified-site
                                                                                                                     Domain
                                                                                                                                             Domain
                                                                                                                                                                        Protein
                                                                                                                                                                                                                                                                                ALCAM; activated leukocyte-cell adhesion molecule; CD6 ligand;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (SYST-) SYSTEMIX INC
                                                                                                                                                                                                  Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                        |:|||| |
167 nitwyrngk 175
                                                                                                                                                                                                                                                                                                                                                                                                                   18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 NLTWYRESK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1996-269990/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sources.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           583 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Uchida N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                      (first entry)
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                                                                                                                     /note-
528..55
                                                                                            /note=
552..5
             /note= "N-glycosylated" 167
                                        /note= "N-glycosylated"
95
                                                                                                                                                                                                               Location/Qualifiers
/note=
                                                                                                                                                                                   /label= Sig_peptide
                                                                               /note-
                                                                                                                                                           /label= Mat_protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65.1%;
                                                                                                                     . 551
"N-glycosylation"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Yang
                                                                                                       "transmembrane domain"
                                                                                                                                  "extracellular domain"
                                                                             "cytoplasmic domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB
42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 583;
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This polypeptide is a human CD6 ligand (see AAW47088), designated activated leukocyte-cell adhesion molecule (ALCAM), that is present on the surface of thymic epithelial cells, monocytes, activated T cells and a variety of other cells. Its amino acid sequence was deduced from cDNA clones (see AAV1354) isolated from human T cell and HL60 cDNA libraries. It is the human homologue of chicken BEN, and shows homology to neurolin, RACE and WC18. Anti-CD6 ligand antibodies, or their binding fragments, are useful for inhibiting binding of CD6 present on the surface of a first cell to that present on a second cell. CD6 ligands and anti-CD6 ligand antibodies are also useful in screening test compounds for the ability to inhibit binding of CD6 ligand to an anti-CD6 ligand antibody to inhibit binding of CD6 ligand to an anti-CD6 ligand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note- "N-glycosylated"
Misc-difference 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 3; Fig 29; 130pp; English.

    useful for screening column and CD6 ligand antibodies

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Activated leukocyte-cell adhesion molecule (ALCAM), a new CD6 ligand - useful for screening compounds which inhibit interaction of ALCAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-120703/11.
N-PSDB; AAV13954.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-JUL-1996;
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1://// |
167 nitwyrngk 175
                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Aruffo A,
Siadak AW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (BRIM ) BRISTOL-MYERS SQUIBB CO (UYDU-) UNIV DUKE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-JAN-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9803551-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Misc-difference 258
                                                                                               Local Similarity 66.
les 6; Conservative
                                                   3 NLTWYRESK 11
                                                                                                                                                                                                                                                   (all claimed).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bowen MA,
                                                                                                                                                                                                       583 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96US-0684594.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note≈ "N-glycosylated" 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /note= "N-glycosylated" 499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note= "N-glycosylated"
480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "encoded by CAR"
457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note= "N-glycosylated"
447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note= "N-glycosylated" 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /label- Met, Thr
/note- "encoded by AYG (polymorphism in nucleotide
/note- "encoded by AYG (polymorphism in nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "N-glycosylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /label= Asn, Ser
/note= "encoded"
                                                                                                               65.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Haynes BF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "encoded by ART (polymorphism in nucleotide sequence"
                                                                                          Score 41; DB 19; Length 583; Pred. No. 42; 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Marquardt H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patel
                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  present
                                                                                               Gaps
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                                         Qy
                                                                                                                                                                                                                                                        The invention relates to peptides (AAY69576-Y69586, AAY69598-Y69599) that CC may be used to induce anti-IgE (immunoglobulin E) autoantibodies in a Go dog. IgE is an important mediator of canine allergic responses, including CC Type I immediate hypersensitivity. It is estimated that up to 30% of all GO dogs suffer from allergies or allergy related skin disorders, and callergic dermatitis is thought to affect between 3 and 15% of dogs. CC common cenine allergens include fleas, pollers, moulds and dust, with CC flea allergy being the most frequent. Once IgE has been released in response to allergen, the IgE binds to receptors on mast cells. The IgE composes to allergen, the IgE binds to receptors on mast cells. The IgE composes to allergen, the IgE binds to receptors on mast cells. The IgE conservative variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE could be produced on mast cells. The autoantibodies produced on a circulating IgE could be IgE conservative variations thereof, that are accessible in circulating IgE could be produced on mast cells. The autoantibodies produced on the invention starget only circulating IgE could be IgE conservative variations thereof, that are accessible in circulating IgE could be IgE conservative variations thereof, that are accessible in the absence conservative variations thereof, that are accessible in the absence in the bessible to a seven in the absence conservative variation peptides therefore target only circulating IgE could be IgE conservation of allergic response that targets the IgE-captessing B cell, which affects IgE conservations be cell for destruction. The peptides of the invention composed with peptide and conservation between an anti-canine of invention of the present in an immune in a dog. Sequences and Sequences and Sequences with the anti-c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 19
                                                                                             Query Match
Best Local S
Matches 7
                                                                                                                                                                                                     Sequence 11 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-APR-1998;
30-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Felis catus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAY69591 standard; peptide; 11 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 6; Page 19; 38pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-118182/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lawton R, Mermer B, Francoeur G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (IDEX-) IDEXX LAB INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10-NOV-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IgE; immunoglobulin E; feline; allergy; canine; prophylaxis; treatment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Feline IgE-derived peptide, SEQ ID NO:16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-APR-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY69591;
                                                                                             Local Similarity
nes 7; Conserv
       1 GMNLTWYRES 10
                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98US-0058332
99US-0281761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99EP-0107020
                                                                                                               70.0%;
                                                                                          Score 40; DB 21;
Pred. No. 0.8;
1; Mismatches 2
                                                                                               2
                                                                                                                                      Length 11;
                                                                                               0;
                                                                                               Gaps
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RESULT I AAY50881 ID AAY.

ID AAY.

XX AAY.

XX AAY.

XX AAY.

DF 24-:

XX Can

XX Can

KW Can

KW epi

XX Syn

XX Syn
ARBSGLT :
AABGSQ04
ID AABG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 63.9 Rest Local Similarity 70.0 Matches 7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention describes a novel binding protein which specifically binds to native canine free or B-cell bound IgE, and which doesn't bind to IgE when the IgE is bound to mast cells. The peptide products of the invention have anti-allergic activity. The antibodies bind to defined epitopes on free or B-cell bound IgE molecules which have an important role in allergic reaction. The specific binding proteins are used to produce a pharmaceutical composition, preferably with a diluent, which can be used for prophylaxis or treatment of canine allergy.

AAY50876-Y50900 represent peptide mimotopes used in the method of the inventor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Canine; allergy; antibody 8H.8; IgE; B cell; mast cell; anti-allergy; epitope; prophylaxis; treatment; mimotope.
                                                                                                                                                                                                                                                                                             AAB06204;
                                                                                                                                                                                                                                                                                                                                                AAB06204 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 2; Page 13; 30pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Binding proteins used for treatment or prophylaxis of canine allergy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lawton R, Mermer B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-APR-1998;
30-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antibody 8H.8 binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-FEB-2000
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                              Ornithorhynchus anatinus
                                                                                                                Platypus; immunoglobulin E;
                                                                                                                                                                         Platypus IgE heavy chain constant regions 2, 3 and
                                                                                                                                                                                                                                      22-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (IDEX-) IDEXX LAB INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              invention.
                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GMNLTWYRES 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gmtltwsren 10
                                                                                        eczema;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0058331.
99US-0281760.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99EP-0107035.
                                                                                    immunogenic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              63.5%;
70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  feline mimotope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Francoeur
                                                                                    peptide
                                                                                                                   IgE; vaccination; infection; allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 40; DB Pred. No. 0.8; 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <u>ი</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DВ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
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RESULT :
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                                                                                                                                                                                                                                                                                                                                                                Matches
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence is an immunogenic peptide consisting of the heavy chain constant regions 2, 3 and 4 of the platypus IgE. It was used to construct a number of immunogenic peptides which consisted of regions of IgE from different mammals, which appear to cause a stronger polyclonal anti-self IgE response than peptides consisting of the same regions from one mammal. Immunogenic peptides, particularly those consisting of different heavy chain constant regions, can be used for vaccination in humans, against bacterial and viral infections and allergies, such
                    11-OCT-1996;
10-APR-1998;
27-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Fig 2; 50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Immunogenic polypeptides useful for preventing the harmful effects of immunoglobulin {\tt E} in mammals -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-NOV-1998;
22-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200025722-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
                                                                                                                                                       Human; anti-Rh(D) antibody; Rh(D) binding protein; immunostimulant;
red blood cell; Rh phenotype; diagnosis; therapeutic.
                                                                                                                                                                                        Human anti-Rh(D) chain I16 protein sequence.
                                                                                                                                                                                                              14-SEP-2001
                                                                                                                                                                                                                                     AAG93603;
                                                                                                                                                                                                                                                           AAG93603 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                             as asthma,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-365342/31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hellman LT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (RESI-) RESISTENTIA PHARM AB
                                                                                       03-JUL-2001.
                                                                 29-JAN-1999;
                                                                                                            US6255455-B1.
                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                   163 gmevtwsres 172
                                                                                                                                                                                                                                                                                 22
                                                                                                                                                                                                                                                                                                                                         1 GMNLTWYRES 10
                                                                                                                                                                                                                                                                                                                                                                Similarity 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                       343 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                             fur, pollen and food allergies and eczema.
                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                             (first entry)
                    96US-0028550.
98US-0081380.
97US-0884045.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0106652.
99US-0401636.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99WO-SE01896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
1..343
                                                                  99US-0240274.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /label= OTHER
/note= "Xaa=unknown"
                                                                                                                                                                                                                                                                                                                                                                            63.5%;
70.0%;
                                                                                                                                                                                                                                                            107
                                                                                                                                                                                                                                                                                                                                                                1;
                                                                                                                                                                                                                                                                                                                                                                            Score 40;
Pred. No.
                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                         DB
35;
                                                                                                                                                                                                                                                                                                                                                                                      21;
                                                                                                                                                                                                                                                                                                                                                                 2;
                                                                                                                                                                                                                                                                                                                                                                                     Length 343;
                                                                                                                                                                                                                                                                                                                                                                  Indels
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                                                                                                                                                                                                                                                                                                                                                                 Gaps
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0;

(UYPE-) UNIV

PENNSYLVANIA

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В
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Best Local Similarity
5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes an isolated Rh(D) binding protein, preferably a human antibody, (I) having an antino acid sequence comprising one of the sequences (S) given in AAG93558 to AAG93659, (I) has immunostimulant activity, and can be used as an immune system stimulant (I) can be used as an immune system stimulant (I) can be used in diagnostic and therapeutic medicine. The antibodies are used in diagnostics that require human antibodies instead of animal antibodies, such as determine the Rh phenotype of human red blood cells. AAH68615 to AAH68726 represent the nucleotide sequence which encode AAG93558 to AAG93669. AAG93670 to AAG93697 represent anti-Rh(D) heavy chain CDR3 amino acid sequences which are given in the exemplification of the present invention.
This polypeptide comprises the intermediate-type immunoglobulin like domain (IgI of bovine butyrophilin (BTN, see AAW97812), a major
                                                                         New modified butyrophilin - not cross-reactive with myelin oligo-dendrocyte glycoprotein, useful in dairy products, vaccines, and assays for susceptibility to multiple sclerosis
                                                                                                                                                                                                                                                                                             04-FEB-1999.
                                                                                                                                                                                                                                                                                                                           W09905162-A1.
                                                                                                                                                                                                                                                                                                                                                                                  Butyrophilin; cattle; bovine; multiple sclerosis; diagnosis; vaccine; transgenic animal; food; dairy product; milk.
                                                                                                                                                                                                                                                                                                                                                                                                                                Bovine butyrophilin IgI domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-MAY-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAW97813;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; Column 44; 162pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New isolated protein, preferably a human anti-Rh(D) antibody for use in diagnostics requiring a human instead of an animal antibody and in therapeutic medicine -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Siegel DL;
                                           Disclosure; Page 38-39; 53pp; English.
                                                                                                                                        WPI; 1999-142845/12.
                                                                                                                                                                      Linington C,
                                                                                                                                                                                                  (UYMA-) UNIV MARYLAND BALTIMORE.
                                                                                                                                                                                                                                                               22-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                        Bos taurus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAW97813 standard; Protein; 130 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N-PSDB; AAH68660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GMNLTWYRES 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001-388931/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       107 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                      Mather IH;
                                                                                                                                                                                                                                   97US-0053376.
                                                                                                                                                                                                                                                               98WO-US15062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ω,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 38; DB 22; Length 107; Pred. No. 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CC component of the milk fat globule membrane and member of the communoglobulin (Ig) superfamily. The IgI domain of BTN has a high code degree of identity with the IgY domain of myelin/ofigodendrocyte glycoprotein (MOG, see AAM97817). Immunisation with exogenous BTN crimines the production of antibodies which cross-react with condition is directed to methods of modifying the BTN protein to eliminate sequences that elicit this immune response to MOG, e.g. climinate sequences that elicit this immune response to MOG, e.g. climinate sequences that elicit this immune response to MOG, e.g. climinate sequences that elicit this immune response to MOG, e.g. composed of an exophasmic domain of a non-human BTN (nbFN) (preferably bovine) producing a humanised chimeric BTN composed of an exophasmic domain comprising a human IgI domain and compositing a nibrN (preferably bovine) B30,2 region. The hypertion compositing a nibrN (preferably bovine) B30,2 region. The hypertion compositing a nibrN (preferably bovine) B30,2 region. The hypertion compositing a nibrN (preferably bovine) B30,2 region. The hypertion compositing a nibrN (preferably bovine) B30,2 region. The hypertion compositing a nibrN (preferably bovine) B30,2 region. The hypertion compositing a nibrN (preferably bovine) B30,2 region. The hypertion composition of the endogenous BTN gene of an induct BTN is milk. Dairy products including modified into the composition of the nibrN (preferably bovine) B30,2 region. The hypertion of a human patient at risk of developing a product of the patient from injecting bovine BTN is also possible, by screening the patient from injecting bovine BTN is also cossible, by screening the patient from high and constructs based on nucleic acids encoding naTN, are used as vaccines to induce immunological tolerance to nhBTN in humans (claimed).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                     Secreted protein; gene therapy; vaccine; cancer; leukemia; autoimmune disease; allergy; inflammation; graft rejection; hyperproliferation; cardiovascular; infection.
                                                                             WPI; 2001-071148/08.
                                                                                                                                                                                              11-JUN-1999;
                                                                                                                                                                                                                                  01-JUN-2000; 2000WO-US15137.
                                                                                                                                                                                                                                                                           21-DEC-2000.
                                                                                                                                                                                                                                                                                                                 WO200076531-A1
                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gene 47 related peptide #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-MAR-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAB60775;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAB60775 standard; peptide; 193 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                       (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 || | |:||
34 gmelrwfre 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 66.
nes 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GMNLTWYRE 9
                                                                                                                   Ruben SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              130 AA;
                                                                                                                                                                                              99US-0138625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               66.7%;
                                                                                                                   Komatsoulis GA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 38; DB
Pred. No. 27;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 20; Length 130; 27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
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0;

Nucleic acids encoding 47 human secreted polypeptides, useful for preventing, diagnosing and/or treating e.g. cancers, Parkinson's disease and diabetic retinopathy .

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RESULT 25
AAW10505
ID AAW105
XX AAW105
XX AAW105
XX 12-SEP
XX 501ub1
XX Solub1
XX Solub1
XX Solub1
XX Boluba1

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-OCT-1995;
07-JUN-1995;
07-JUN-1995;
07-JUN-1995;
A novel soluble fused major histocompatibility complex (MHC) heterodimer:peptide complex, comprises DNA encoding 1st and 2nd MHC domains, e.g. the present sequence, linked by DNA encoding a 5-25 residue linker, and a DNA encoding an antigenic peptide able
                                                                                                                                                                                                       Novel fused major histocompatibility complex:antigenic peptide complex - useful to induce tolerance to an autoantigen-related disease e.g. insulin-dependent diabetes mellitus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Soluble; fusion; major histocompatibility complex; MHC; region; heterodimer; complex; alpha2; antigen; binding groove; tolerance; autoantigen; disease; insulin dependent; diabetes mellitus; IDDM; antagonist; T cell; anergy; presenting cell; NOD mouse;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            proteins may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate polypeptide expression. For example, they may be used in gene therapy or in vaccines. Typical of diseases which are potentially treatable are cancers (including leukemia), autoimmune diseases, allergies, inflammation, graft rejection, hyperproliferation, cardiovascular diseases (particularly critical limb ischemia and coronary disease) and any
                                                                                                                                                                                                                                                                                                                              WPI; 1997-052337/05.
N-PSDB; AAT60698.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9640944-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Class II; alphal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alphalalpha2 region of Class II NOD mouse MHC (IAg7).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAW10505;
                                                                                                                                                      Example 3; Pages 132-133; 142pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                 Deshpande S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ANER-) ANERGEN INC. (ZYMO) ZYMOGENETICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-DEC-1996
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAW10505 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to 26 secreted human proteins. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 523-524; 525pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           infectious
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      involving abnormal angiogenesis, neurodegeneration and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GMNLTWYRE 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gmelrwfre
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 193 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                 Gross JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95US-0480002.
95US-0482133.
95US-0483241.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95US-0005964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96WO-US10102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Protein; 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                 Kindsvogel W,
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
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                                                                    Query Match
Best Local S
Matches 6
                                                                                                                                                                                                                                to associate with a peptide binding groove of the MHC molecule, linked in frame to the DNA encoding the 2nd domain by a DNA encoding a 5-25 residue linker. The complex can be used to induce immunological tolerance in adults susceptible to, or suffering from an autoantigen related disease, e.g. insulin dependent diabetes mellitus (DDM), by antagonising the binding of particular T cells and antigen presenting cells, to induce anergy (immunological non-responsiveness) in the targeted T cell. As the heterodimers and corresponding antigen are permanently linked into a single chain, obviating the requirement for complex heterodimer truncation or
                                                                                                                                                               Sequence
                                                                                                                                                                                                  peptide loading.
                                                                                                                                                                                                                      formation, the complex eliminates inefficient and non-specific
2 MNLTWYRESK 11
                                                                    Similarity 60.0 6; Conservative
                                                                                                                                                               196 AA;
                                                                                      60.3%;
                                                                    Score 38; DB Pred. No. 42; 2; Mismatches
                                                                                                          18;
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Search completed: April 21, 2002, 10:14:14 Job time: 184 sec

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Result
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Perfect score:
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Maximum Match 100%
Listing first 50 summaries
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                                                                                                                                                                                                                            Score
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19.611 Million cell updates/sec
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Gapop 10.0 , Gapext 0.5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TLLEYRM 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /SIDS1/gcgdata/geneseq/geneseqp/AA1980.DAT:*
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AAB21922
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AAY50878
AAU03292
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Fruit fly G protei Membrane dipeptida Human prostate hom Mouse prostate hom Oyster-derived HIV Peptide SEQ ID NO:
HIV-1 protease inh
HIV-1 protease inh
                                                                                                                                                                                                                        Description
                                                                                                                                                                   Immunogenic
Antibody 8H
                                                                                                                                                                     8H.8
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Peptide ligand bin	AAW95149		7	œ	17	
Membrane dipeptida	AAY48887		7	8	17	49
AE101 analogue eff	AAW47946	19	7	48.6	17	
Human glycoprotein	AAR85590	17	7	œ	17	47
Rheumatoid arthrit	94	20	0	8	17	46
1 ar	AAW47948	19	0	48.6	17	45
	723	19	0	8	17	44
	722	19	6 1	œ	17	43
	22	19	0	ω.	17	42
	AAW87227	19	0	8	17	41
correspon	AAR56261	15	σ	æ	17	40
	AAR04740	11	6	48.6	17	9
Peptide motif of S	AAY83328	21	5	œ	17	38
O	AAY93426	21	ر ن	œ	17	37
a <u>1</u>	AAB36777	21	5	œ •	17	36
-beta1	AAB36775	21	υī	8	17	35
mays pathoge	AAY39643	20	5	8	17	34
AE101 analogue eff	AAW47949	19	σ	œ	17	<u>ω</u>
Interleukin-6 anta	AAW12518	18	ហ	œ	17	32
Residues 359-363 o	AAW02183	17	տ	æ	17	31
Cyclic pentapeptid	AAW05258	17	տ	8	17	30
മ	AAW47950	19	4	æ	17	29
	AAY49795	20	7	٠.	18	28
	AAY49785	20	7	<u>, , , , , , , , , , , , , , , , , , , </u>	18	27
Amino acids 498-50	AAY43592	20	7	51.4	18	26
GLU4 synthetic pep	AAR94522	17	7	51.4	18	25
HRG-betal variant	AAB36778	21	ъ	51.4	18	24
Cyclic pentapeptid	AAW09684	17	5	51.4	18	23
4	AAR90639	17	7	54.3	19	22
	AAR24664	13	7	54.3	19	21
	AAR24652	13	7		19	20
Immunomodulatory p	AAR24651	13	7	4.	19	19
segu	AAG63041	22	6		19	18
#9	AAW75276	19	6	54.3	19	17
-	4	19	6	4.	19	16
Peptide determined	AAW87232	19	6		19	
Peptide determined	72	19	6	54.3	19	
Immunomodulatory p	46	13	6	4.	19	13
Immunomodulatory p	AAR24624	13	6	54.3	19	12

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RESULT
AAY69584
WPI; 2000-118182/11.
                                                09-APR-1998;
30-MAR-1999;
                                                                         09-APR-1999;
                                                                                                                           Synthetic
                                                                                                                                         Immunogenic; autoimmunity; IgE autoantibody; immunoglobulin E;
allergy; canine; prophylaxis; treatment.
                                                                                                                                                                                    19-APR-2000
                                                                                                                                                                                                     AAY69584;
                                                                                                                                                                                                                     AAY69584 standard; peptide; 7 AA.
               Lawton R, Mermer B,
                                                                                                          EP955311-A2
                              (IDEX-) IDEXX LAB INC
                                                                                         10-NOV-1999
                                                                                                                                                                    Immunogenic
                                                                                                                                                                                                                                     Н
                                                                                                                                                                    peptide SEQ ID
                                                                                                                                                                                    (first entry)
                                                98US-0058332.
99US-0281761.
                                                                         99EP-0107020
               Francoeur G;
                                                                                                                                                                    NO:9, for anti-IgE autoantibody generation.
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Sequences AAY69576-Y69586 and AAY69598-Y69599 represent peptides that may CC be used to induce anti-IgE (immunoplobulin E) autoantibodies in a dog. CQ IgE is an important mediator of canine allergic responses, including Type CC suffer from allergies or allergy-related skin disorders, and allergic constitutivity. It is estimated that up to 30% of all dogs CC suffer from allergies or allergy-related skin disorders, and allergic CC dermatitis is thought to affect between 3 and 15% of dogs. Common canine CC allergens include fleas, pollens, moulds and dust, with flea allergy CC being the most frequent. Once IgE has been released in response to design the most frequent. Once IgE has been released in response to CC allergen, the IgE binds to receptors on mast cells. The IgE molecules CC can then become cross-linked, which induces the mast cells. The IgE molecules CC expending the variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE conservative variations thereof, that are accessible in circulating IgE avoiding the possibility that they may cross-link bound IgE molecules, CC which mould exacerbate an ongoing allergic response even in the absence CC immunisation with such peptides therefore target only circulating IgE, CC avoiding the possibility that they may cross-link bound IgE molecules, CC which would exacerbate an ongoing allergic response even in the absence CC response that targets the IgE-expressing B cell, which affects IgE synthesis by downregulating IgE production by B cells and/or targetting CC the IgE-producing B cell for destruction. The peptides of the invention CC are therefore useful for the treatment or prophylaxis of allergic SX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     . Matches
Binding proteins used for treatment or prophylaxis of canine allergy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Canine; allergy; antibody 8H.8; IgE; B cell; mast cell; anti-allergy; epitope; prophylaxis; treatment; mimotope.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antibody 8H.8 binding mimotope 1.
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                                                                             WPI; 2000-040833/04.
                                                                                                                                                  Lawton R,
                                                                                                                                                                                                                                                                                                                                   09-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                            09-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EP957111-A2.
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                                                                                                                                                                                                                           (IDEX-) IDEXX LAB INC.
                                                                                                                                                                                                                                                                                                    30-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New peptides, useful for generating canine autoantibodies against immunoglobulin \mathtt{E} (IgE) to treat allergic symptoms -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 tlleyrm 7
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7; Conserv
                                                                                                                                              Mermer B,
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                                                                                                                                                                                                                                                                                                98US-0058331.
99US-0281760.
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                                                                                                                                                  Francoeur G;
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Pred. No. 4.3e+05;
Mismatches 0;
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Best Local :
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ANY50876-Y50900 represent peptide mimotopes used in the method of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fruit fly; G protein coupled receptor; DmgPCR6AL/DL;
human immunodeficiency virus; HIV; cancer; Parkinson's disease;
diabetes; obesity; atherosclerosis; thrombosis; stroke; renal fai
inflammation; rheumatoid arthritis; autolmmune disorder;
neurological disorder; schizophrenia; manic depression; dementia;
severe mental retardation; dyskinesia; Huntington's disease;
The sequence is a fruit fly G protein coupled receptors. DmGPCRGAL/DL, peptide ligand. The proteins are useful for inducing an immune response against itself in a mammal. The nucleic acids are useful for identifying
                                                                                                                                                                                         New Drosophila melanogaster GPCR nucleic acids and polypeptide useful for inducing an immune response, for identifying homologs and for treating e.g. diabetes, obesity and manic depression -
                                                                                                                         Example 9; Page 100; 110pp; English.
                                                                                                                                                                                                                                                                                                                              WPI; 2001-316333/33.
                                                                                                                                                                                                                                                                                                                                                                                          Lowery DE, Smith VG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                           (PHAA ) PHARMACIA & UPJOHN CO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-OCT-2000; 2000WO-US29002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Drosophila melanogaster.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAU03292 standard; Peptide; 7 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tourette's syndrome; ligand.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fruit fly G protein coupled receptors, DmGPCR6aL/bL ligand #41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAU03292;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity tes 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ω
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-0425676.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note= "C-terminus is amidated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 35; DB 21; 100.0%; Pred. No. 4.3e+05; ative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                          Kubiak TA,
                                                                                                                                                                                                                                                                                                                                                                                                  Larsen MJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 7;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            renal failure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 50 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  imum DB seq length: 0 imum DB seq length: 11
A_Geneseq_1101:*

| SIDS1/gcgdata/geneseq/geneseqp/AA1980.DAT:*
| SIDS1/gcgdata/geneseq/geneseqp/AA1981.DAT:*
| SIDS1/gcgdata/geneseq/geneseqp/AA1982.DAT:*
| SIDS1/gcgdata/geneseq/geneseqp/AA1983.DAT:*
| SIDS1/gcgdata/geneseq/geneseqp/AA1983.DAT:*
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| SIDS1/gcgdata/geneseq/geneseqp/AA1999.DAT:*
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Gapop 10.0 , Gapext 0.5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             522463 seqs, 74073290 residues
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Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GMNLTWYRESK 11
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match 1	% Query Match Length DB	BB	ID	Description
_	63	100.0	11	21	AAY69585	Canine IgE-derived
ν	63	100.0	11	21	AAY50879	8H.8 binding canin
ω	54	85.7	11	21	AAY50882	Antibody 8H.8 bind
4	40	63.5	11	21	AAY69591	Feline IgE-derived
5	40	63.5	11	21	AAY50881	Antibody 8H.8 bind
σ	ω ω	52.4	10	18	AAW22686	BSW17 peptide mime
7	30	47.6	7	21	AAY69590	Human IgE-derived
8	30	47.6	7	21	AAY50880	Antibody 8H.8 bind
9	30	47.6	9	17	AAW49652	Human leucocyte an
10	30	47.6	10	20	AAY40646	S2 derivative #8,
11	30	47.6	10	21	AAB29985	Scaffold protein S

49 50	48	46		44	<u>ω</u>	42	41	40	39	38	37	36	35 5	34	ယ	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
24 24	24 24	24	24	24	24	24	24	24	24	24	24	24	25	25	25	25	2 5	25	25	25	25	25	25	25	25	26	26	26	26	26	27	27	27	27	28	29
38.1 38.1	38.1 38.1		38.1																												42.9	2		Ď.		46.0
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18 18	22	22	22	20	15	14	14	22	21	20	20	17	21	21	21	20	20	20	17	20	20	15	15	15	20	19	17	22	15	15	18	18	22	18	17	19
AAW45164 AAW37010	AAJ01677 AAB78520	AAJ00972	AAJ00475	AAY03896	AAR60437	AAR36083	AAR36082	AAB69385	AAY86979	AAW85714	AAY55233	AAR90506	AAB29989	AAB29988	AAB29987	AAY40650	AAY40649	AAY40648	AAW12590	AAY46859	AAY55436	AAR60431	AAR60446	AAR60425	AAY04349	AAW54288	AAW05276	AAB87239	AAR60447	AAR60424	AAW22687	83	AAU15304	AAW22699	AAW4 9505	AAW53900
n cartil 2 derive	Heparitis C virus HIV-1 gp 41 enhanc	Sign		Q.	fer	O	itis	Grand fir monoterp	Human haematopoiet	Peptide derived fr	ATCC HB 11884 mono	idoma	protein		ffold protein	derivative	derivat	S2 derivative #10,	binding		HLA binding plu-1	Antiproliferative	Antiproliferative	Antiproliferative	Dengue antigenic p	Cytohesin 1 PH dom	PERB11-5D peptide.	Breast-cancer asso	Antiproliferative	Antiproliferative	BSW17 peptide mime	7	\mathbf{r}	BSW17 peptide mime	Human leucocyte an	Interleukin-1 rece

PI XX DR	XA	PR	PR	PF	XX	PD	X	PN	XX	SO	XX	X	XΨ	×	DE	×	X	AC	×	IJ	RESULT
Lawton R, Mermer B, Francoeur G; WPI; 2000-118182/11.	(IDEX-) IDEXX LAB INC.	30-MAR-1999; 99US-0281761.		09-APR-1999; 99EP-0107020.		10-NOV-1999.		EP955311-A2.		Canis familiaris.			<pre>Immunogenic; autoimmunity; IgE autoantibody; immunoglobulin E;</pre>		Canine IgE-derived peptide E3a.5, SEQ ID NO:10.		19-APR-2000 (first entry)	AAY69585;		AAY69585 standard; peptide; 11 AA.	RESULT 1 AAY69585

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Sequences AAY69576-Y69586 and AAY69598-Y69599 represent peptides that may CC be used to induce anti-igE (immunoglobulin E) autoantibodies in a dog. CC IgE is an important mediator of conline allergic responses, including Type CC I immediate hypersensitivity. It is estimated that up to 30% of all dogs CC suffer from allergies or allergy-related skin disorders, and allergic CC dermatitis is thought to affect between 3 and 15% of dogs. Common canine CC allergens include fleas, pollens, moulds and dust, with flea allergy CC being the most frequent once IgE has been released in response to CC allergen, the IgE binds to receptors on mast cells The IgE molecules CC can then become cross-linked, which induces the mast cells to release histamile, which leads to the manifestation of allergic Symptoms. The CC conservative variations thereof, that are accessible in circulating IgE but not in IgE bound to mast cells The autoantibodies produced on immunisation with such peptides therefore target only circulating IgE, CC avoiding the possibility that they may cross-link bound IgE molecules, CC which would exacerbate an ongoing allergic response even in the absence CC of allergen. Anti-IgE autoantibody induction results in an immune CC aresponse that targets the IgE-expressing B cell, which affects IgE CC synthesis by downregulating IgE production by B cells and/or targetting CC autoanties in a dom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
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Best Local
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Binding proteins used for treatment or prophylaxis of canine allergy
                                   WPI; 2000-040833/04.
                                                                                                                                              09-APR-1998;
30-MAR-1999;
                                                                                                                                                                                                  09-APR-1999;
                                                                                                                                                                                                                                     17-NOV-1999
                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                        Canine; allergy; antibody 8H.8; IgE; B cell; mast cell; anti-allergy.
                                                                                                                                                                                                                                                                                                                                                                                              8H.8 binding canine mimotope 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAY50879;
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                                                                       Lawton R,
                                                                                                        (IDEX-) IDEXX LAB INC.
                                                                                                                                                                                                                                                                                                                                            epitope; prophylaxis; treatment; mimotope.
                                                                                                                                                                                                                                                                                                                                                                                                                                 24-FEB-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY50879 standard; peptide; 11 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New peptides, useful for generating canine autoantibodies against immunoglobulin E (IgE) to treat allergic symptoms -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 gmnltwyresk 11
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                                                                    Mermer B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11 AA;
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                                                                                                                                           98US-0058331
99US-0281760
                                                                                                                                                                                                  99EP-0107035
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Pred. No. 7.9e-05;
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Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes a novel binding protein which specifically binds to native canine free or B-cell bound IgE, and which doesn't bind to IgE when the IgE is bound to mast cells. The peptide products of the invention have anti-allergic activity. The antibodies bind to defined epitopes on free or B-cell bound IgE molecules which have an important role in allergic reaction. The specific binding proteins are used to produce a pharmaceutical composition, preferably with a diluent, which can be used for prophylaxis or treatment of canine allergy.

ANYSOB76-Y50900 represent peptide mimotopes used in the method of the invention.
Sequence
                                              role in allergic reaction. The specific binding proteins are used to produce a pharmaceutical composition, preferably with a diluent, which can be used for prophylaxis or treatment of canine allergy.

AAY50876-Y50900 represent peptide mimotopes used in the method of the
                                                                                                             This invention describes a novel binding protein which specifically binds to native canine free or B-cell bound IgE, and which doesn't bind to IgE when the IgE is bound to mast cells. The peptide products of the invention have anti-allergic activity. The antibodies bind to defined epitopes on free or B-cell bound IgE molecules which have an important
                                                                                                                                                                                                                                                 Binding proteins used for treatment or prophylaxis of canine allergy -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                  invention.
                                                                                                                                                                                                                  Example 2; Page 13; 30pp; English.
                                                                                                                                                                                                                                                                                   WPI; 2000-040833/04.
                                                                                                                                                                                                                                                                                                                                                                                    30-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                 09-APR-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                epitope; prophylaxis; treatment; mimotope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Canine; allergy; antibody 8H.8; IgE; B cell; mast cell; anti-allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antibody 8H.8 binding substituted canine mimotope 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-FEB-2000
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                                                                                                                                                                                                                                                                                                                                                 (IDEX-) IDEXX LAB INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-NOV-1999.
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 11 AA;
                                                                                                                                                                                                                                                                                                                Mermer B,
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                                                                                                                                                                                                                                                                                                                                                                                  98US-0058331.
99US-0281760.
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Pred. No. 7.9e-05;
; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 11;
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Result
No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 50 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Database
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
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     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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   protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                  Query
Match
   de
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Gapop 10.0 ,
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TDX2_THEAC
TDX_TRYBR
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KAD_TREPA
YF52_HAEIN
UNG_STRAG
UNG_STRAG
UNG_BUCAL
RS3A_METJA
VIF_VILV1
YD83_YEAST
VIC1_AGRT5
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TPS1_BRARE
                                                                                                                                                                                                                                                                               KV2B_HUMAN
YGL2_STRCO
CNTF_CHICK
                                                                                                                                                                                                                                                                                                                  CPRP_CANPG
YOG6_CAEEL
Y292_METJA
SY02_HUMAN
SY02_HUMAN
SY02_MACFA
DCMA_METTE
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ULT 2 6_CAEEL YOG6_CAEEL P34615; 01-FEB-1994 01-FEB-1994 01-JUN-1994 HYPOTHETICAL ZK112.6. Caenorhabdit Eukaryota; w Rhabditidae; NCBI_TaxID-6	Query Mat Best Loca Matches 1 L	SEQUENCE. SEQUENCE. SEQUENCE. TISSUE-Sinus MEDLINE-9902 Chung J.S., "Amino acid hormone (CHH pagurus.") Regul. Pept!- TISSUE STHE EYES THE EYES Neuropeptide SEQUENCE 3	SULT 1 CPRP_CANPG CPRP_CANPG P81.033; P81.033; 15-JUL-1998 (Rel. 36, Las. 15-DEC-1998 (Rel. 37, Las.	00000000000000000000000000000000000000
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                                                       STRAINE-JAL-1 / DSM 2661 / ATCC 43067;
MEDLINE-96337999; PubMed-8688087;
Bult C.J., White O. Olsen G.J., Zhou L., Fleischmann R.D.,
Sutton G.G., Blake J.A., Fitzgerald L.M., Clayton R.A., Gocayne J.D.,
Kerlavage A.R., Dougharty B.A., Tomb J.-F., Adams M.D., Reich C.I.,
Overbeek R., Kirkness E.F., Weinstock K.G., Merrick J.M., Glodek A.,
Scott J.L., Geoghagen N.S.M., Weidman J.F., Fuhrmann J.L., Nguyen D.,
Utterback T.R., Kelley J.M., Peterson J.D., Sadow P.W., Hanna M.C.,
Cotton M.D., Roberts K.M., Hurst M.A., Kaine B.P., Borodovsky M.,
Klenk H.-P., Fraser C.M., Smith H.O., Woese C.R., Venter J.C.,
"Complete genome sequence of the methanogenic archaeon, Methanococcus,
Jannaschii.";
                                                                                                                                                                                                                                                                                                                                                                                                                                       Y292_METJA
Q57740;
01-NOV-1997
01-NOV-1997
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Bonfield J., Burton J., Connell M., Copsey T., Cooper J.,
Craxton M., Dear S., Du Z., Durbin R., Favello A., Fraser A.,
Fulton L., Gardner A., Green P., Hawkins T., Hillier L., Jier M.,
Johnston L., Jones M., Kershaw J., Kirsten J., Laisster N.,
Latreille P., Lightning J., Lloyd C., Mortimore B., O'Callaghan M.,
Farsons J., Percy C., Rifken L., Roppra A., Saunders D., Shownkeen
Sims M., Smaldon N., Smith A., Smith A., Sonnhamer E., Staden R.,
Sulston J., Therry Mieg J., Thomas K., Vaudin M., Vaughan K.,
Waterson R., Watson A., Weinstock L., Wilkinson-Sproat J.,
Wohldman P., Weinstock L., Wilkinson-Sproat J.,
Wohldman P., Weinstock L., Wilkinson-Sproat J.,
                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                            NCBI_TaxID=2190;
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SEQUENCE 6
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WormPep; ZK112.6; C
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-NOV-1997 (Rel.
-AUG-2001 (Rel.
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          SUBCELLULAR LOCATION: INTEGRAL MEMBRANE PROTEIN (POTENTIAL).
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Best Local
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P13500; Q9UDF3;
01-JAN-1990 (Rel. 13, Created)
01-JAN-1990 (Rel. 14), Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
20-AUG-2011 (Rel. 40, Last annotation update)
SMALL INDUCIBLE CYTOKINE AZ PRECURSOR (MONOCYTE CHEMOTACTIC PROTEIN 1)
(MCD-1) (MONOCYTE CHEMOATTRACTIANT PROTEIN-1) (MONOCYTE CHEMOTACTIC
AND ACTIVATING FACTOR) (MCAF) (MONOCYTE SECRETORY PROTEIN JE) (HC11).

SCYAZ OR MCP1..........
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SY02_I
Shyy Y.J., Li Y.S., Kolattukudy P.E.; "Structure of human monocyte chemotactic protein gene regulation by TPA."; Biochem. Biophys. Res. Commun. 169:346-351(1990). [5]
                                                                                                                                                  SEQUENCE FROM N.A. MEDLINE=90290466; PubMed=2357211;
                                                                                                                                                                                                                                       "Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning, expression in mitogen-stimulated blood mononuclear leukocytes, and sequence similarity to mouse competence gene JE."; FEBS Lett. 244:487-493(1989).
                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
MEDLINE-89153605; PubMed=2465924;
YOShimura T., Yuhki N., Moore S.K., Appella E., Lerman M.I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
MEDLING-90097880; Pubmed-2513477;
Mollins B.J., Stier P., Ernst T., Wong G.G.;
"The human homolog of the JE gene encodes a monocyte secretory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.

MEDLINE-89165862; PubMed-2923622;

MEDLINE-89165862; PubMed-2923622;

Furutani Y., Nomura H., Notake M., Oyamada Y., Fukui T., Yamada M.,

Furutani Y., Oppenheim J.J., Matsushima K.;

Tarsen C.G., Oppenheim J.J., Matsushima K.;

"Cloning and sequencing of the cDNA for human monocyte chemotactic and activating factor (MCAF).";
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Biochem. Biophys.
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Commun. 159:249-255(1989).
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Query Match

88.98;

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Length 74;

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conserved hypothetical protein MJ022 - Methanococcus jannaschii C;Species: Methanococcus jannaschii C;Species: Methanococcus jannaschii C;Date: 13:Sep-1996 #sequence_revision 13-Sep-1996 #text_change 21-Jul-2000 C;Accession: E64336 R;Bult, C.J.; Mitte, O.; Olsen, G.J.; Zhou, L.; Fleischmann, R.D.; Sutton, G.G.; Blak R;Bult, C.J.; Overbeek, R.; Kirkness, E.F.; Weinstock, K.G.; Merrick, J.M.; Glodek, rson, J.D.; Sadow, P.W.; Hanna, M.C.; Cotton, M.D.; Roberts, K.M.; Hurst, M.A. Science 273, 1058-1073, 1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Status: preliminary; not compared with conceptual translation A; Molecule type: mRNA A; Residues: 1-93 «HAID C; Superfamily: immunoglobulin V region; immunoglobulin homology C; Keywords: heterotetramer; immunoglobulin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ig heavy chain V-VIII region - African clawed frog (fragment)
c;Species: Xenopus Laevis (African clawed frog)
c;Date: 31-Dec-1933 #sequence_revision 31-Dec-1993 #text_change 11-Jan-2000
C;Accession: I47624
R;Haire, R.N.; Amemiya, C.T.; Suzuki, D.; Litman, G.W.
J. Exp. Med. 171, 1721-1737, 1990
A;Title: Eleven distinct V-H gene families and additional patterns of sequence variation A;Reference number: A47624; MUID:90237760
Accession: I47624; MUID:90237760
Accession: I47624; MUID:90237760
Accession: I47624; MUID:90237760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Description: Gene expression during somatic embryogenesis.
Reference number: 216588
Accession: T09146
Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: mRNA
A; Residues: 1-92 < DON>
A; Cross: references: EMBL:L47628; NID:g1350491; PID:g1350492
A; Genetics: EMBL:
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C;Species: pices glauca (white spruce)
C;Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 11-Jun-1999
C;Accession: T09146
R;Dong, JZ.; Dunstan, D.I.
R;Dong, JZ.; Dunstan, D.I.
Submitted to the EMBL Data Library, June 1996
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                                                  Blake,
dek, A.
A;Reference number: A60299; MUID:90216082 A;Accession: A60299
                                                  A;Cross-references: GB:S71513; NID:g240867; PIDN:AAB20651.1; PID:g240868 R;Bottazzi, B.; Colotta, F.; Sica, A.; Nobili, N.; Mantovani, A. Int. J. Cancer 45, 795-797, 1990 A;Title: A chemoattractant expressed in human sarcoma cells (tumor-derived -1/MCAF).
                                                                                                                                                                             A.Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-99 <YO2>
                                                                                                                                                                                                                                                 A;Cross-references: GB:X14768; NID:g34513; PIDN:CAA32876.1; PID:g34514
A;Experimental source: glloma cell line U-105MG
R;Yoshimura, T.; Leonard, E.J.
adv. Exp. Med. Biol. 305, 47-56, 1991
A;Title: Human monocyte chemoattractant protein-1 (MCP-1).
A;Reference number: I51841; MUID:92095166
A;Recession: I51841
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A; Residues: 1-99 < ROL>
A; Residues: 1-99 < ROL>
A; Cross-references: GB: M30816; GB: M31625; GB: M31626; NID: g188701; PIDN: AAA36330.1; PI
R; Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J.
FEBS Lett. 244, 487-493, 1989
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A;Start codon: TTG
C;Superfamily: Methanococcus jannaschii conserved hypothetical
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A; Residues: 1-99 < YOS>
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A;Accession: S03339
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A;Authors: Kaine, B.P.; Borodovsky, M.; Klenk, H.P.; Fraser, C.M.; Smith, H.O.; Woese A;Title: Complete genome sequence of the methanogenic archaeon; Methanococcus jannasc A;Reference number: A64300; MUID:96337999
A;Accession: E64336
A;Status: preliminary; nucleic acid sequence not shown; translation not shown A;Molecule type: DNA A;Residues: 1-93 <BUID
A;Residues: 1-93 <BUID
A;Residues: 1-93 <BUID
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A; NoLecule type: DNA
A; Molecule type: DNA
A; Rosidues: 1-99 <SHY>
A; Rosidues: 1-99 <SHY>
A; Cross-references: GB: M37719; NID: g187447; PIDN: AAA18102.1; PID: g487124
A; Cross-references: GB: M37719; NID: g187447; PIDN: AAA18102.1; PID: g487124
A; Cross-references: GB: M37719; NID: g187447; PIDN: AAA18102.1; PID: g487124
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A; Cross-references: GB: M37719; NID: g187447; PIDN: AAA18102.1; PID: g487124
A; Cross-references: GB: M37719; NID: g187447; PIDN: AAA18102.1; PID: g487124
A; Cross-references: GB: M37719; NID: g187447; PID: g1 C;Species: Homo sapiens (man)
C;Date: 20-Feb-1993 #sequence_revision 20-Feb-1993 #taxt_change 16-Jul-1999
C;Accession: A35474; A33476, S03339; I51841; A60299; A32300; A32396; A34561; I57488; R;Shyy, Y.J.; Li, Y.S.; Kolattukudy, P.E.
Blochem. Blophys. Res. Commun. 169, 346-351, 1990
A;Title: Structure of human monocyte chemotactic protein gene and its regulation by T
A;Reference number: A35474; MUID:90290466 R;Rollins, B.J.; Stier, P.; Ernst, T.; Wong, G.G.

R;Cell. Biol. 9, 4687-4695, 1989

A;Title: The human homolog of the JE gene encodes a monocyte secretory protein. A;Reference number: A33476; MUID:90097880

A;Accession: A33476 monocyte chemoattractant protein 1 precursor - human: N_i Alternate names: GDCF-1; GDCF-1;

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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01-NOV-1999 (TrEMBLrel. 12, Last annotation update)
0RF74A PROTEIN.
                                                                                                                                                                                                                                                                          MEDLINE-98048466; PubMed=9387220; Stanley E., Fitzgerald G.F., Le Marrec C., Fayard B., van Sinderen D.; Stanley E., Fitzgerald G.F., Le Marrec C., Fayard B., van Sinderen D.; Sequence analysis and characterization of phi 01205, a temperate bacteriophage infecting Streptococcus thermophilus CNRZ1205.*; Microbiology 143:0-0(0), Microbiology 143:0-0(0), EMBL; U88974; AAC79571.1;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalla; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Bovinae; Bos.
Streptococcus thermophilus bacteriophage Sfi21.
Viruses; dsDNA viruses, no RNA stage; Tailed phages; Siphoviridae
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Bacteria; Firmicutes; Baci
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Irwin D.M., Ahern K.G., Pearson G.D.N., Macgillivray R.T.A.;
"Characterization of the bovine prothrombin gene.";
Biochemistry 24:8854-6861(1985).
EMBL; M12049; AAA30780.1; -.
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01-MAY-1999 (TIEMBLIEL. 10, Last sequence update)
01-MAY-1999 (TIEMBLIEL. 10, Last annotation updat
BOVINE PROTHROMBIN MRNA, PARTIAL CDS (FRAGMENT).
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"Methanobacterium thermoautotrophicum encodes two multisubunit
membrane-bound [NiFe] hydrogenases.Transcription of the operons
sequence analysis of the deduced proteins.";
submitted (AUG-1999) to the BML/GenBank/DDBJ databases.
EMBL; AJ243656; CAB52781.1; ...
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Archaea: Buryarchaeota; Methanobacteriales; Methanobacteriaceae;
Methanothermobacter.
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TRANSMEMBRANE PROTEIN 8.3 KDA.
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MEDLINE-98160788; PubMed-9499809;
Desiere F., Lucchini S., Brussow H.;
"Evolution of Streptococcus thermophilus bacteriophage genomes by modular exchanges followed by point mutations and small deletions and
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MEDLINE=97344856; PubMed=9201223;
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

11	10	9	80	7	O	U	4	ω	N	1	Result
16	16	16	16	16	16	16	16	16	16	16	Score
88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	88.9	Query Match I
23	23	23	11	11	11	11	10	7	7	7	Length DB
22	22	21	15	15	15	12	22	20	20	20	;
AAY72692	AAY72689	AAB15851	AAR48309	AAR48304	AAR48303	AAR13244	AAB85375	AAY34084	AAY34080	AAY34076	ID
Human monocyte che	Human monocyte che	Chemokine derived	Antiinflammatory p	Antiinflammatory p	Antiinflammatory p	Nocifensin anti-in	Glial fibrillary a	Bacteroides 100 kD	Bacteroides 100 kD	Bacteroides 100 kD	Description

	16 88.9	49 16 88.9 90	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9.	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	16 88.9	
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AT TOWNSHIP	AAR51942	AAG01263	AAM24442	AAB10256	AAY14222	AAR86859	AAY69030	AAB12818	AAW40175	AAW11131	AAW09374	AAR87677	AAR87676	AAR87680	AAR53398	AAR28660	AAP90292	AAW13596	AAR87678	AAW95037	AAW95036	AAW95035	AAW13597	AAW13599	AAG55104	AAW13598	AAB58811	AAG74441	AAM05416	AAM30271	AAM17762	AAY48467	AAY45304	AAG74890	AAR58398	AAY12972	AAY72683	7268	AAY72693	
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                                                                                                Braun J, Cohavy O;
WPI; 1999-551215/46
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Bacteroides antigen; inflammatory bowel disease; IBD; pANCA;
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The invention provides a method for the diagnosis, prevention and treatment of ulcerative colitis (UC) using histone HI-like antigen, porin antigen or a Bacteroides antigen as a target antigen. The nove
                                                                                                          Use of histone Hl, porin or Bacteroides antigens as targets for the diagnosis, prevention and treatment of ulcerative colitis \,
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                                                                      Example 6; Page 78; 134pp; English.
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The invention provides a method for the diagnosis, prevention and treatment of ulcerative colitis (UC) using histone H1-like antigen, a porin antigen or a Bacteroides antigen as a target antigen. The novel method of diagnosing UC in a subject suspected of having inflammatory bowel disease (IBD) comprises: (1) obtaining a sample from the subject; (2) contacting the sample with a histone H1-like antigen, or perinuclear anti-neutrophil cytoplasmic antibody (pANCA)-reactive fragment, the presence of the histone H1-like antigen, or the pANCA-reactive fragment, and antibody to the histone H1-like antigen; and (3) detecting the presence or absence of the complex; where the presence of the complex indicates that the subject has UC. The pANCA-reactive histone H1-like antigen, porin antigen and Bacteroides antigen are useful in the
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Bacteroides antigen; inflammatory boxel disease; IBD; pANCA;
perinuclear anti-neutrophil cytoplasmic antibody; diagnosis.
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0S-08-471-052A-56

US-08-471-053-56

US-08-471-993-56

US-08-471-800-56

US-08-471-800-56

US-08-471-800-56

US-08-471-800-56

US-08-471-800-56

US-08-250-958-1

US-08-250-958-1

US-08-235-558-2

US-08-615-232A-5

US-08-482-111-12

PCT-US93-0814-1

PCT-US93-0874-4

US-08-482-847-3

US-08-782-8830-5

US-08-782-8830-5

US-08-782-8830-5

US-08-798-143-8
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56, Appl
1, Appl
1, Appl
12, Appl
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12, Appl
13, Appl
14, Appl
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5177060-30
; PATCH NO. 5177060
; PATCH NO. 5177060
; PATCH NO. 5177060
; PATCH NO. 5177060
; TITLE OF INVENTION: ANTI-INFLAMMATORY PEPTIDES AND TO INHIBIT VASCULAR LEAKAGE IN INJURED TISSUES
; NUMBER OF SEQUENCES: 30
; CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/462,578
; FILING DATE: 09-JAN-1990
; FILING DATE: 09-JAN-1990
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LENGTH: 11

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US-09-044-856A-5 US-09-044-855A-5 US-09-044-855A-5 US-09-044-855A-5 US-08-679-93A-552 US-08-679-935B-23 US-08-793-624-23 US-08-793-624-23 US-08-793-624-23 US-08-793-624-5 US-08-308-793-62-5 PCT-US93-09649A-5 US-08-308-793-468-2 US-09-242-948-4 US-09-242-948-4 US-09-242-948-4 US-09-487-67-096-2 US-09-487-63-2

ALIGNMENTS

AND TREATMENT

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US-08-176-500-56
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036-2711
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                 Sequence 56, Application US/08176500 Patent No. 5498538
                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match

Best Local Similarity 60.0

Matches 3; Conservative
                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Kay, B. K.
APPLICANT: Fowlkes, D
TITLE OF INVENTION: T
                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                 ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
                                                                                                                                                                                                                                                                                                                                                                                                                1 LXXYR 5
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APPLICATION NUMBER: US/08/176,500

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ATTORNEY/AGENT INTO....

NAME: Misrock, S. Leslie
REGISTRATION NUMBER: 18,872
REFERENCE/DOCKET NUMBER: 1101-:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212 790-9090
TELEPHONE: 212 869-8864/9741
TELEPAX: 212 869-8864/9741
TELEX: 66141 PENNLE
INFORMATION POR SEQ ID NO: 56:
SEQUENCE CHARACTERISTICS:
LENGTH: 38 amino acids
TYPE: amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: unknown
MOLECULE TYPE: peptide
US-08-176-500-56
                                                                                                                       MEDIUM:
COMPUTER: IBM PC.
CORRATING SYSTEM: PC.DOS/MS.
SOFTWARE: PATENTIA Release #1.0, Versi
SOFTWARE: Patentin Release #1.0, Versi
APPLICATION UNMBER: US/08/471,052A
FILING DATE: 06 - JUNE 1995
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: MISTOCK, S. Leslie
REGISTRATION UNMBER: 1101-179
REFERENCE/DOCKET NUMBER: 1101-179
TELECOMMUNICATION INFORMATION:
TELECHONE: 212 790-990
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               TELEPHONE: 212 790-9090
TELEPAX: 212 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 56:
SEQUENCE CHARACTERISTICS:
*LENGTH: 38 amino acids
TYPE: amino acid
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 56, Application US/08471052A Patent No. 5625033 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 88.9%;
Best Local Similarity 60.0%;
Matches 3; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Kay, B. K.
APPLICANT: Kay, B. M.
TITLE OF INVENTION: Totally Synthetic Affinity Reagents
NUMBER OF SEQUENCES: 166
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/013,416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
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Pred. No. 2.6e+02;
Pred. No. 2.5e+02; Indels
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RESULT 5 39-56 US-08-471-939-56; Sequence 56, Application US/08471939; Patent No. 5844076 CENERAL INFORMATION:
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US-08-189-331-56
; Sequence 56, Application US/08189331
; Patent No. 5747334
; Patent No. 5747334
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Best Local Similarity
Matches 3; Conserv
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Best Local Similarity
Matches 3; Conserv
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TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 56:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM;
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OSOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                              TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: unknown
MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 38 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212 790-9090
APPLICANT: Kay, B. K.
APPLICANT: Fowlkes, D. M.
TITLE OF INVENTION: Totally Synthetic Affinity Reagents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Kay, B. K.
APPLICANT: Fowles, D. M.
TITLE OF INVENTION: Totally Synthetic Affinity Reagents
NUMBER OF SEQUENCES: 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26 LTSYR 30
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Misrock, S. Lesl REGISTRATION NUMBER: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: U.S.A.
ZIP: 10036-2711
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CITY: New York
STATE: New Yor
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1155 Avenue of the Americas
                                                                                                                                                                                                                                                                      Conservative
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                                                                                                                                                                                                                                                                  88.9%; Score 16; DB 1; Length 38; 60.0%; Pred. No. 2.6e+02; tive 0; Mismatches 2; Indels
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Result
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Match
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1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
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18
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Copyright (c) 1993 - 2000
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       H69062
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E84230
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H69699
T47309
                                                                                                              F85843
B85692
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Compugen Ltd.
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3.704 Million cell updates/sec
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A;Reference number: 221836
A;Accession: T39209
A;Status: preliminary; translated from GB/EMBL/DDBJ

C;Accession: T39209
R;McDougall, R.; Barrell, B.G.; Rajandream, M.A.; Wood, submitted to the EMBL Data Library, September 1997

C;Species: Schizosaccharomyces pombe
C;Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 03-Dec-1999

very hypothetical protein SPAC9E9.17c - fission yeast (Schizosaccharomyces pombe)

50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	ω 5	34	ω ω	32	31	30
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208	206	203	202	201	200	199	198	197	195	194	190	189	189	189	188	185	184	182	176	175
N	ν	N	N	N	N	N	ν	N	ν	N	N	N	N	N	N	2	Ν	2	N	N
T30859	E75345	T18653	G71295	F82604	D83116	D82865	JQ1052	C82619	A75295	T11928	T28093	C71427	D83008	T05905	D75499	A28677	A83722	T49540	T47361	D86471
fertility inhibiti	peptide methionine	hypothetical prote	conserved hypothet	conjugal transfer	50S ribosomal prot	conjugal transfer	repressor protein	HetI protein XF193	conserved hypothet	ribosomal protein	hypothetical prote	hypothetical prote	outer membrane lip	ids-4 protein - ba	probable acetyltra	aminoglycoside N6′	hypothetical prote	hypothetical prote	hypothetical prote	hypothetical prote

ALIGNMENTS

A; Molecule type: DNA
A; Residues: 1-56 <MCD>
A; Cross-references: EMBL: 299262
A; Experimental source: strain 9
C; Genetics:
A; Gene: SPDB: SPAC9E9.17c gene C protein - phage alpha-3
C;Species: phage alpha-3
C;Species: phage alpha-3
C;Date: 10-Mar-1994 #sequence_revision 10-Mar-1994 #text_change 20-Sep-1999
C;Accession: \$2327
C;Accession: \$2327
R;Kodaira, K. I; Nakano, K.; Okada, S.; Taketo, A.
Biochim. Biophys. Acta 1130, 277-288, 1192
A;Title: Nucleotide sequence of the genome of the bacteriophage alpha3: interrelation A;Reference number: \$22324; MUID:92223109
A;Accession: \$22327
A;Molecule type: DMA
A;Residues: 1-68 <KOD>
A;Cross-references: EMBL:X60322; NID:g14775; PIDN:CAA42877.1; PID:g14779
C;Genetics:
A;Gene: C
C;Superfamily: phage phi-X174 gene C protein RESULT S22327 밁 A; Map position: A; Introns: 27/2 QУ Query Match
Best Local Similarity
Matches 3; Conserv 37 YRTTL 1 YRXXL 5 N 41 Conservative EMBL:299262; PIDN:CAB58229.1; GSPDB:GN00066; SPDB:SPAC9E9.17c se: strain 972h-; cosmid c9E9 88.9%; Score 16; DB 2; Le Pred. No. 4.1e+02; 0; Mismatches 2; Length 56; Indels 0, Gaps 0;

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cytochrome-c oxidase (EC 1.9.3.1) chain VIIa precursor, isoform L - bovine N.Alternate names: cytochrome-c oxidase chain VIIa, hepatic C. Stecies: Bos prinigenius taurus (cattle) C. Datte: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 11-Jun-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Accession: H59096
R;Okinaka, R.7.; Cloud, K.; Hampton, O.; Hoffmaster, A.R.; Hill, K.K.; Keim, P.; Koehler J. Bacteriol. 181, 6509-6515, 1999
A;Title: Sequence and organization of pXO1, the large Bacillus anthracis plasmid harbori A;Reference number: A59091; MUID:99445483
A;Accession: H59096...
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Kol. Gen. Genet. 210, 373-380, 1987

A;Title: Variable copy number DNA sequences in rice
A;Reference number: S01057; MUTD:88121710

A;Accession: S01059
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A;Residues: 1-75 <OKI>
A;Cross-references: GB:AF065404; NID:g4894216; PIDN:AAD32352.1; PID:g4894264
A;Experimental source: strain Sterne
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hypothetical protein pXO1-48 - Bacillus anthracis virulence plasmid pXO1 C;Species: Bacillus anthracis C;Cate: 12-Nov-1999 #sequence_revision 12-Nov-1999 #text_change 11-May-2000 C;Date: 12-Nov-1999 #sequence_revision 12-Nov-1999 #text_change 11-May-2000
                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: EMBL:X06611; NID:g20380; PIDN:CAA29826.1; PID:g20383
                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: DNA
A; Residues: 1-81 <KIK>
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C;Species: Oryza sativa (rice)
C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 21-Jul-2000
C;Accession: S01059
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  Query Match
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A; Status: nucleic acid sequence not shown
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Mote: this corrects the sequence reported with accession number S07891
R; Seelan, R.S.; Scheuner, D.; Lomax, M.I.; Grossman, L.I.
Rucleic Acids Res. 17, 6410, 1989
A; Title: Nucleotide sequence of a CDNA for bovine cytochrome c oxidase subunit VIIa.
A; Reference number: S07891; MUID:89366688
A; Accession: S07891
                                                                                                                       R:TOriyama, K.; Hanaoka, K.; Okada, T.; Watanabe, M.
FEBS Lett. 424, 234-238, 1998
A;Title: Molecular cloning of a CDNA encoding a pollen extracellular protein as a pot
A;Tetreence number: 218017; MUID:98198560
A;Accession: T14380
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Molecule type: mRNA
A;Molecule type: mRNA
A;Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                        probable pollen coat protein 1 - turnip
C;Species: Brassica rapa (turnip)
C;Date: 20-Sep-199 #sequence_revision 20-Sep-1999 #text_change 21-Jul-2000
C;Accession: T14380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C;Superfamily: mammalian cytochrome-c oxidase chain VIIa C;Keywords: liver; mitochondrion; oxidoreductase F;1-23/Domain: transit peptide (mitochondrion) #status predicted <TNP>F;24-83/Product: cytochrome-c oxidase chain VIIa #status predicted <MAT>
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A;Residues: 1-52, 'R', 54-83 <SE2>
A;Cross-references: EMBL;X15235; NID:g273; PIDN:CAA33313.1; PID:g274
R;Yanamura, W; Zhang, Y.Z.; Takamiya, S.; Capaldi, R.A.
Blochemistry 27, 4909-4914, 1988
Bjochemistry 27, 4909-4914, 1988
A;Title: Tissue-specific differences between heart and liver cytochrome c oxidase.
A;Reference number: A90531; MUID:89000697
A;Accession: C29968
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J. Biol. Chem. 266, 19752-19757, 1991
A;Title: Cytochrome c oxidase subunit VIIa isoforms. Characterization and expression A;Reference number: S18187; MUID:92011781
A;Accession: B41034
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R:Seelan, R.S.; Grossman, L.I.
Genomics 18, 527-536, 1993
A;Title: Structural organization and evolution of the liver isoform gene for bovine A;Reference number: A49355; MUID:94140349
A;Accession: A49355
                              C; Genetics:
                                                         A; Cross-references: EME
A; Experimental source:
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A; Residues: 24-51, 'NI', 54-56,'V',58,'M',60 <YAN>
A; Experimental source: liver
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A; Residues: 1-83 <SE3>
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NOTI_RABIT
RL6_MYCGA
AAC6_CITDI
VATE_THETH
RM06_PROWI
OPNR_AGRRH
MSRA_DEIRA
RL13_CHLSW
RGCE_ECOLI
RM06_SCHPO
V414_TREPA
CUTI_FUSSC
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END3_MYCLE
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01-DEC-1992 (Rel. 24, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
20-AUG-2001 (Rel. 13, Created)
20-AUG-2001 (Rel. 14, Last sequence update)
20-AUG-2001 (Rel. 14,
                                                                                                      MEDLINE-89000697; PubMed-2844245;
Yanamura W., Zhang Y.-Z., Takamiya S., Capaldi R.A.;
"Tissue-specific differences between heart and liver cytochrome
oxidase;";
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"Cytochrome c oxidase subunit VIIa isoforms. Characterization and expression of bovine cDNAs.";

O. Biol. Chem. 266:19752-19757(1991).
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia, Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea
Bovidae; Bovinae; Bos.
NCBI_TaxID=9913;
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   BYOCHEMISTRY 27:4909-4914(1988).
-I- FUNCTION: THIS PROTEIN IS ONE OF THE NUCLEAR-CODED POLYPEPTIDE CHAINS OF CYTOCHROME C OXIDASE, THE TERMINAL OXIDASE IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.

MEDLINE-89366688; PubMed=2549516;

Seelan R.S., Scheuner D., Lomax M.I., Grossman L.I.;

Seelan R.S., Scheuner D. Lomax M.I., Grossman L.I.;

"Nucleotide sequence of a cDNA for bovine cytochrome c oxidase submit VITA ".
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-I-FUNCTION: C PROTEIN IS ONE OF THE PROTEINS INVOLVED IN THE PRODUCTION AND PACKAGING OF VIRAL SINGLE-STRANDED DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-NOV-1997 (Rel.
C PROTEIN.
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[2]
REVISIONS, SEQUENCE FROM N.A.
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Viruses; ssDNA viruses; Microviridae;
                                                                                                                                                                                                                                                                                SEQUENCE OF 24-60.
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Best Local
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                     CONFLICT
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                       -!- SUBCELLULAR LOCATION: SECRETED.
-!- SIMILARITY: BELONGS TO THE MOTILIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last sequence update)
MOTILIN PRECURSOR (CONTAINS: MOTILIN; MOTILIN
                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
TISSUE=Duodenal mucosa;
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EMBL; X15235; CAA33313.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
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046617;
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Oxidoreductase; Inner membrane; Mitochondrion; Transit peptide.
TRANSIT 1 23 MITOCHONDRION.
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-i- CATALYTIC ACTIVITY: 4 FERROCYTOCHROME C + O(2) = 2 H(2)O
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C29968; C29968.
CPPro; IPR003177; COX7a.
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Pred. No. 2.1e+02;
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AL -> NI (IN REF. 3).
A -> V (IN REF. 3).
L -> M (IN REF. 3).
254D7610F2EF106F CRC64;
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P97025 brevibacter	S	061605 drosophila	Q91t29 arabidopsis	Q66019 crimean-con	Q9fgb2 arabidopsis	O49380 arabidopsis	Q9i193 pseudomonas		o	w	O11312 molluscum c	-	Q9shw1 arabidopsis	3	Q9m1m5 arabidopsis	Q9rjf7 streptomyce	*	Q9nh50 penaeus mon	Q9z5y0 frankia sp.	Q9guz6 sanderia ma	Q9d8e1 mus musculu	0	Q9z5t2 zymomonas m	Q9mcs8 bacteriopha	salmonella	S.		061383 papilio gla	9qvz1	Q9c8a2 arabidopsis	

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YRXXL 5	Query Match 88.9%; Score 16; DB 8; Length 44; Best Local Similarity 60.0%; Pred. No. 9.1e+02; Matches 3; Conservative 0; Mismatches 2; Indels 0; Gaps	SEQUENCE 44 AA; 5279 MW; 6EFB539307F2DF89 CRC64;	Mitochondrion.	Pfam; PF00119; ATP-synt_A; 1.	InterPro: IPR000568; ATP_synt_A.	EMBL: 271697; CAA96374.1; .	watanabe K., Thomas k.H.; Submitted (MAY-1996) to the EMBL/GenBank/DDBJ databases.	Segawa R., Kobayashi T., Numachi K., Ueda T., Nishikawa K.,	Yamazaki N., Ueshima R., Terrett J.A., Yokobori S., Kaifu M.,	TISSUE=HEPATOPANCREAS;	SEQUENCE FROM N.A.	[1]	NCBI_TaxID~58912;	Helicacea; Bradybaenidae; Euhadra.	Eukaryota; Metazoa; Mollusca; Gastropoda; Pulmonata; Stylommatophora;	Mitochondrion.	Euhadra herklotsi.	ATPASE SUBUNIT 6 (FRAGMENT).	01-JUN-2001 (TrEMBLrel. 17, Last annotation update)	(TrEMBLrel. 03,	01-MAY-1997 (TrEMBLrel. 03, Created)	P92073;	P92073 PRELIMINARY; PRT; 44 AA.

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRAIN-972H-;
Barrell B.G., Rajandream M.A., Wood V.;
Submitted (SEP-1997) to the EMBL/GenBank/DDBJ databases.
EMBL; Z99262; CAB58229.1; -
EMBL; Z99262; CAB58229.1; -
EMBL; Z99262; CAB58229.1; -
EMBL; Z99262; CAB58229.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q9UT14:
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAY-1997 (TrEMBLrel. 03, Created)
01-MAY-1997 (TrEMBLrel. 03, Last sequence update)
01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
HYPOTHETICAL 7.1 KDA PROTEIN (FRAGMENT).
Acinetobacter sp. ADP1.
Bacteria; Proteobacteria; gamma subdivision; Moraxellaceae;
                                                                                                                                                                                                                               SEQUENCE
                                                                                                                                                                                                                                                   Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                       ability to grow on exogenous cis, cis-muconate as the sole carbon source.";
                                                                                                                                                                                                                                                                                                                                                                                                Williams P.A., Shaw L.E.; "mucK, a gene in Acinetobacter calcoaceticus ADP1 (BD413), encodes the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Acinetobacter.
NCBI_TaxID=62977;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. STRAIN-972H-;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Schizosaccharomyces pombe (Fission yeast).

Bukaryota; Fungi; Ascomycota; Schizosaccharomycetes;
Schizosaccharomycetales; Schizosaccharomycetaceae;
Schizosaccharomyces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=97440147; PubMed=9294455;
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22 YRTAL 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 37 YRTTL 41
                                                                                                Local Similarity es 3; Conserv
                                              1 YRXXL 5
                                                                                                                                                                                                                                                                                                  Bacteriol. 179:5935-5942(1997).
BL; U87258; AAC27119.1; -.
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                                                                                                                                                                                                                               63 AA; 7128 MW; 49B15779381B69B2 CRC64;
                                                                                                   Conservative
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                                                                                                                     Score 16;
Pred. No. 1
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Pred. No. 1
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                                                                                             Mismatches
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                                                                                  DB 2;
1.3e+03;
2;
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1.e+03;
1.e+03;
1.e+03;
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RESULT
Q9F6T0
ID Q9
AC Q9
DT 01
DT 01
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AC Q91
AC Q91
DT 011
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Best Local Similarity
Matches 3; Conserv
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Best Local Similarity 60.0%;
Matches 3; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Murphy L., Quail M., Harris D., Rajandream M., Ivens A., Barrell B.; Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases. EMBL; AL160493; CAB97857.1; -. Hypothetical protein. NON_TER 66 66 SEQUENCE 66 AA; 7876 MW; A3CA0216D54D3C73 CRC64:
01-MAR-2001 (TrEMBLrel. 16,
01-MAR-2001 (TrEMBLrel. 16,
01-MAR-2001 (TrEMBLrel. 16,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          O9NM53;
01-OCT-2000 (TrEMBLrel. 15, Created)
01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
HYPOTHETICAL 7.9 KDA PROTEIN (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shi H., Wang Z.;
"Rabbit potassium channel Kv4.2 mRNA, partial cds.";
Submitted (AUG-1998) to the EMBL/GenBank/DDBJ databases.
EMBL, AF085171; AAD49438.1; --
EMBL, AF085171; AAD49438.1; --
Enterpro; IPRO03131; K_tetra.
Pfam; PF02214; K_tetra; 1.
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OPTV14:

OPTV14:

O1-MAY 2000 (TrEMBLrel. 13, Created)

O1-MAY 2000 (TrEMBLrel. 17, Last sequence update)

O1-JUN-2001 (TREMBLrel. 17, Last annotation update)

POTASSIUM CHANNEL KV4.2 (FRAGMENT).

Cryctolagus cuniculus (Rabbit).

Eukaryota; Metazoa: Chorddat; Craniata; Vertebrata; Eut
Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
                                                                                           Q9F6T0;
                                                                                                                         Q9F6T0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A. STRAIN-FRIEDLIN;
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SEQUENCE 63 AA; 7091 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ledishmania major.
Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae; Leishmania.
NCBI_TaxID-5664;
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   Created)
Last sequence update)
Last annotation updat
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Pred. No. 1.4e+03;
0; Mismatches 2;
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                                                                                                                         73 AA.
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Database
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Maximum Match 100%
Listing first 50 summaries
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Copyright (c) 1993 - 2000 Com
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2.344 Million cell updates/sec
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Peptide #5316 enco	Varicella zoster v	Peptide #8204 enco	Human cell death p	Human cell death p	Peptide NO54. Syn	C-terminally subst	C-terminally subst	Radiolabelled HiNO	Human inducible ni	HiNOS immunogenic	Description

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AAB25318	5401	AAG23444	AAG82284	AAG54025	AAB41090	AAG15005	AAB14134	AAG14924	AAG14925	AAG14926	AAB65824	AAB65819	AAG73819	AAG15006	AAB18103	AAG72506	AAG71349	AAB38583	AAB20102	AAB62651	AAP91380	AAY12157	AAB42644	AAM31485	AAB43078	AAM33274	AAY19484	54	AAM34343	ААМ03493	26	AAM15759	AAW96852	AAM01783	44	AAM14043	683	AAB73931
Eucalyptus grandis	ß	bidopsis	Ω	Arabidopsis thalia	0	s thali	ס		Arabidopsis thalia	ha	TANGO		n colon	Arabidopsis thalia		Human OR-like poly		ecreted	ilin. Su		Porcine prepromoti	Human 5' EST secre	FX ORE	Peptide #5522 enco	Ξ	#73	s pt	colon ca	#8380	2175	#2305	#2193	acid	#465	#486	de #477 encc	leic acid bind	Varicella zoster V

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XX AAWI
XX AAWI
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DT 20-C
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XX C-te
KW C-te
KW anti
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XY O3-C
PR 03-C
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     WPI; 1997-108622/10.
                                                                                                                                                                                                                                                                                                   07-JUN-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAW12322 standard; Peptide; 9 AA.
                                                                                               Calaycay JR, Mumford RA,
                                                                                                                                                                                                                                                                                                                                                                                                        03-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
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                                                                                                                                                                                              (MERI ) MERCK & CO INC.
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                                                                                                    Schmidt JA,
                                                                                                         Weidner JR;
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This is the epitope of the human inducible nitric oxide synthase (hiNOS) without the C-terminal leucine. The primary wild type antigen is given in AAW12317. It was shown that the C-terminal leucine of the epitope is required for antibody recognition by the ability of radiolabelled peptide to be displaced by unlabeled peptide, and by the specificity of the antibody to a C-terminal leucine. Antibodies raised against the primary antigen can be used to purify hiNOS from cultured cells in a claimed method. Elevated levels of hiNOS are implicated in a wide variety of diseases, particularly inflammatory conditions such as psoriasis, uveitis, rheumatoid arthritis and many others. The antibodies can be used to detect or quantify hiNOS (by usual immunoassay or immunolocalisation techniques), also to evaluate the activity of iNOS modulators (which are potentially useful as therapeutic agents).
This sequence is an immunogenic peptide for detecting inducible nitric oxide synthase (1NOS) immunoreactivity which is used in a novel method to detect iNOS in a biological sample. The level of iNOS is related to an inflammatory response, e.g. infection mediated by bacteria, yeast or
                                                                                                                               Detection of inducible nitric oxide synthase - useful for monitoring levels over periods of time, or to diagnose disease associated with
                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Inducible nitric oxide synthase; iNOS; endothelial nitric oxide synthase;
eNOS; diagnosis; detection; inflammatory response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Purificm. of human inducible mitric oxide synthase from cultured cells - using specific antibody directed against a C-terminal
                                                                                                                                                                                 WPI; 1997-470890/43
                                                                                                                                                                                                                 Sessa WC,
                                                                                                                                                                                                                                                  (UYYA ) UNIV YALE.
                                                                                                                                                                                                                                                                                  15-MAR-1996;
                                                                                                                                                                                                                                                                                                                 14-MAR-1997;
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                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human inducible nitric oxide synthase immunogenic peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAW23311;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAW23311 standard; peptide; 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 3; Fig 2; 52pp; English.
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                                                                                Page 9; 32pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                96US-0013470.
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4.3e+05;
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This sequence is a synthetic radio-iodinated peptide based on a C-terminal epitope of human inducible nitric oxide synthase (hiMOS). It was used to generate a standard curve in a competitive radioimmunoassay for hiMOS products. It was shown that the C-terminal leucine is required for antibody recognition by the ability of the radiolabelled peptide to be displaced by unlabeled peptide. The specificity of the antibody to a C-terminal leucine was also shown with use of peptides having amino acid substitutions/modifications at the C-terminus (see AAM12320-22), antibodies raised against the primary antigen can be used to purify hiMOS are implicated in a wide variety of diseases, particularly inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a virus, organ transplant rejection, rheumatoid arthritis, interstitial cystitis or cancer. By monitoring levels of iNOS over a period of time it is possible to diagnose a disease or condition associated with increased or decreased iNOS.
                                                                                                                                                                                                                                                                                       Calaycay JR, Mumford RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Modified-site
                                                                                                                                                                        Example 3; Page 19; 52pp; English.
                                                                                                                                                                                                      epitope
                                                                                                                                                                                                                Purifcn. of human inducible nitric oxide synthase from cultured cells - using specific antibody directed against a C-terminal
                                                                                                                                                                                                                                                                                                                  (MERI ) MERCK & CO INC.
                                                                                                                                                                                                                                                                                                                                                07-JUN-1995;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antibody;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             "required for antibody recognition; optionally
amidated in sensitivity assay"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "primary antigen"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "125-I labeled Tyrosine"
                                                                                                                                                                                                                                                                                         Schmidt JA,
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Pred. No. 2.5e+02;
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OM protein - protein search, using sw

model

GenCore version Copyright (c) 1993 - 2000

Compugen Ltd

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Result
No.
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Maximum Match 100%
Listing first 50 summaries
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is derived
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1: /cgn2_6/ptodata/

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    BLOSUM62
Gapop 10.0 ,
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1.192 Million cell updates/sec
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18
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                                 /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
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US-09-461-697-318
US-09-606-143-38/
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US-08-807-332B-9
US-09-308-876-9
US-08-973-963-480
US-08-973-95-480
US-08-637-759B-480
US-08-871-355A-480
US-08-667-729-834B-7
US-08-666-143-47
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US-08-666-143-43
US-08-685-972-48-82
US-09-140-804-2
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US-08-685-992-26
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Sequence 314, App
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sequence 8, Appri	0	Sequence 8, Appli	Sequence 42, Appl	Sequence 6, Appli	Sequence 6, Appli	Sequence 6, Appli	Sequence 11, Appl	Sequence 10, Appl	Sequence 7, Appli	Sequence 2, Appli	Sequence 11, Appl	Sequence 10, Appl	Sequence 7, Appli	Sequence 2, Appli	Sequence 4, Appli	Sequence 60, Appl	Sequence 35, Appl	Sequence 5, Appli	Sequence 4, Appli	Sequence 1, Appli	Sequence 1, Appli	Sequence 4, Appli

ALIGNMENTS

LENGTH: 13 ; TYPE: PRT ; ORGANISM: Homo sapiens US-09-461-697-318 US-09-461-697-314 RESULT Ър δÃ US-09-461-697-318 RESULT Query Match Best Local S Matches 3 APPLICANT: Barby, Shawn APPLICANT: Thomas, Mary Beth APPLICANT: Portbury, Stuart D. APPLICANT: Portbury, Stuart D. APPLICANT: Puranam, Kasturi APPLICANT: Ratz, Lawrence C. TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING TITLE OF INVENTION: AND TREATING CONDITIONS, DISORDERS, OR DISEASES INVOLVING TITLE OF INVENTION: CELL DEATH FILE REFERENCE: 10001-005-999 CURRENT APPLICANTION NUMBER: US/99/461,697 CURRENT FILING DATE: 1999-12-14 NUMBER OF SEQ ID NOS: 466 SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 318 LENGTH: 13 Sequence 318, Application US/0946 Patent No. 6277974 GENERAL INFORMATION: APPLICANT: COGENT NEUROSCIENCE, APPLICANT: Lo, Donald C. Sequence 314, Application US/09461697 Patent No. 6277974 GENERAL INFORMATION: APPLICANT: COGENT NEUROSCIENCE, APPLICANT: Lo, Donald C. APPLICANT: APPLICANT: Local Similarity hes 3; Conserv N 1 YRXXL 5 YRSSL 6 Barney, Shawn Thomas, Mary Beth Conservative 88.9%; US/09461697 0; Score 16; Pred. No. Mismatches DB 73; 4. 2; Length 13; Indels 0 Gaps 0;

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                                                                                    ) MOLECULE TYPE: US-08-606-143-38
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                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: Kilyk Jr., John
REGISTRATION NUMBER: 30763 .
REFERENCE/DOCKET NUMBER: 7175.
TELECOMMUNICATION INFORMATION:
TELEPHONE: (312) 616-5600
TELEFAX: (312) 616-5700
TELEFAX: (312) 616-5700
TELEFAX: 25-353
INFORMATION FOR SEO ID NO: 38:
SEQUENCE CHARACTERISTICS:
LENGTH: 32 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: PORTBURY, Stuart D.

APPLICANT: PURADAM, KASTURI

APPLICANT: KALZ, LAWFENCE C.

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING

TITLE OF INVENTION: CELL DEATH

FILE REFERENCE: 10001-005-999

CURRENT APPLICATION NUMBER: US/09/461,697

CURRENT APPLICATION ONS: 466

NUMBER OF SEQ ID NOS: 465

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 314

TYPE: APPLICATION OF WINDOWS VERSION 4.0

THE REFERENCE SEQ ID NOS: 466

SEQ ID NO 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 38, Appris
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                      Query Match
Best Local Similarity
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MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/606,143
FILING DATE: 23-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: L1, Min
TITLE OF INVENTION: COMPOUNDS AND RELATED M
TITLE OF INVENTION: COMPOUNDS
NUMBER OF SEQUENCES: 45
CORRESPONDENCE ADDRESSE: Leydig, Volt & Mayer, Ltd.
STREET: Two Prudential Plaza, Suite 4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19 YRSSL 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: Two Pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
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                                                                                                        protein
88.9%;
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  Score 16; DB 2; Length 32; Pred. No. 1.8e+02;
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COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

COMPUTER: IBM PC COMPATIBLE

OPERATING SYSTEM: PC_DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/807,332B

FILING DATE: 28 -FEB-1997

CLASSIFICATION: 435

APPLICATION NUMBER: 33,005

RECISTRATION NUMBER: 30,005

RECISTR
                                                                                                                                                                                                                                                                                                                                          ; Sequence 9, Application US/09338876
; Patent No. 6187584
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US-08-807-332B-9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TOPOLOGY: linear ; MOLECULE TYPE: peptide US-08-807-332B-9
                                                                                                                                                                                                                                                                                                                 ; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
"arches 3; Conserva
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                                                                                      APPLICANT: Dreyfus, David H.
APPLICANT: Gelfand, Erwin H.
TITLE OF INVENTION: PRODUCTS AND PROCESSES FOR REGULATION OF
TITLE OF INVENTION: GENE RECOMBINATION
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
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CORRESPONDENCE ADDRESS:
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CITY: Denver
STATE: CO
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STRANDEDNESS:
STREET: 1700
CITY: Denver
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STREET: 1700 Lincoln St., Suite 3500
                            ADDRESSEE: Sheridan Ross
STREET: 1700 Lincoln St., Suite 3500
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Gelfand, Erwin W.
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Result
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Maximum Match 100%
Listing first 50 summaries
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seq length: 2000000000
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Match
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Copyright (c) 1993 - 2000 Comp
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в65219
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nrfG protein - Esc	hypothetical prote	hypothetical prote	iron-sulfur protei	conserved hypothet	hypothetical prote	hypothetical prote	hypothetical prote	motilin precursor	motilin precursor	hypothetical prote	hypothetical prote	probable tail comp	probable tail comp	hypothetical prote	hypothetical prote	hypothetical prote	NADH dehydrogenase	hypothetical prote	hypothetical prote	ZK112.6 protein -

ALIGNMENTS

nitrogenase cofactor synthesis protein nifs - Rhodobacter capsulatus N;Contains: L-cysteine sulfurtransferase (EC 2.8.1.-) C;Species: Rhodobacter capsulatus C;Species: Rhodobacter capsulatus C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 07-Dec-1999 C;Accession: S34816

R; Masepohl, B.; Angermueller, S Mol. Gen. Genet. 238, 369-382,

s;

S.; Hennecke, S.; Huebner, P.; Moreno-Vivian, C.; Klipp 1993

RESULT S34816

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RESULT
T21419
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C;Superfamily: nitrogen fixation protein nifS
C;Superfamily: nitrogen fixation protein nifS
C;Keywords: phosphoprotein; pyridoxal phosphate; sulfurtransferase
F;203/Binding site: pyridoxal phosphate (Lys) (covalent) #status predicted
F;325/Active site: Cys (cysteine persulfide intermediate) #status predicted
A;Reference number: Z19419
A;Accession: T21419
A;Accession: T21419
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-412 <WIL>
A;Cross-references: EMBL:Z81070; PIDN:CAB03005.1; GSPDB:GN00019; CESP:F26E4.13
                                                                                                                              hypothetical protein F26E4.13 - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999 C;Accession: T21419 R;Lightning, J. R;Lightning, J. submitted to the EMBL Data Library, October 1996 A;Reference number: Z19419
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A; Residues: 1-384 <MAS>
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Best Local S
Matches 4
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hypothetical protein SCE94, 30c - Streptomyces coelicolor C;Species: Streptomyces coelicolor C;Species: Streptomyces coelicolor C;Pate: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 03-Dec-1999 C;Accession: T36390 R;Oliver K; Harris, D; Bentley, S.D.; Parkhill, J.; Barrell, B.G.; Rajandream, M.A. submitted to the EMBL Data Library, April 1999 A;Reference number: Z21573 A;Recession: T36390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A:Title: Complete genome sequence of Pseudomonas aeruginosa PA01, an opportunistic pathor A;Reference number: A82950; MUID:20437337
A;Accession: C83567
A;Accession: C83567
A;Status: preliminary
A;Molecula type: DNA
A;Residues: 1-152 <STO>
A;Residues: 1-152 <STO>
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A;Experimental source: strain PAL
R;Experimental source: strain PAL
R;Stover, C.K.; Pham, x.O.; Erwin, A.L.; Mizoguchi, S.D.; Warrener, P.; Hickey, M.J.; Br
adman, S.; Yuan, Y.; Brody, L.L.; Coulter, S.N.; Folger, K.R.; Kas, A.; Larbig, K.; Lim,
Lory, S.; Olson, Y.; Brody, L.L.; Coulter, S.N.; Folger, K.R.; Kas, A.; Larbig, K.; Lim,
Rature 406, 959-964, 2000
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A; Experimental source: strain A3(2) C; Genetics:
                                      A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-208 <OLI>
A;Cross*references: EMBL;AL049628; PIDN:CAB40879.1;
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A;Molecule type: DNA
A;Residues: 1-152 <NAK>
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nes 4; Conserv
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                                           EMBL: AL049628; PIDN: CAB40879.1; GSPDB: GN00070; SCOEDB: SCE94.30c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GB:AE004498; GB:AE004091; NID:g9946491; PIDN:AAG04010.1; GSPDB:GN00
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50.0%;
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Pred. No. 3.3e+02;
0; Mismatches 4
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                                                                                                         Matches
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A;cross-references: GB:AE002457; GB:AE002098; NID:g7226304; PIDN:AAF41462.1; PID:g722
A;Experimental source: serogroup B, Strain MC58
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R;TettelIn, H.; Saunders, N.J.; Heidelberg, J.; Jeffries, A.C.; Nelson, K.E.; Elsen, Hickey, E.K.; Haft, D.H.; Salzberg, S.L.; White, O.; Fleischmann, R.D.; Dougherty, B. ri, H.; Qin, H.; Vamathevan, J.; Gill, J.; Scarlato, V.; Masignani, V.; Pizza, M. Science 287, 1809-1815, 2000

A;Authors: Grandi, G.; Sun, L.; Smith, H.O.; Eraser, C.M.; Moxon, E.R.; Rappuoli, R.; A;Title: Complete genome sequence of Neisseria meningitidis serogroup B strain MC58. A;Reference number: A81000; MUID:20175755

A;Accession: D81125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hypothetical protein NMB1066 [imported] - Neisseria meningitidis (strain MC58 serogro C;Species: Neisseria meningitidis C;Date: 31-Mar-2000 #sequence_revision 31-Mar-2000 #text_change 19-Jan-2001 C;Accession: D81125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Title: Complete DNA sequence of a serogroup A strain of Neisseria menigitidis 22491 A;Reference number: A81775; MUID:20222556 A;Accession: G81894 A;Status: preliminary A;Stat
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A; Residues: 1-226 <TET>
A; Cross-references: GB:/
                                                                                                                                                                                                                                                                                                                                                                             A; Gene: NMB1066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Status: preliminary
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35 LARYRSAL 42
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                                                                                                                                                                                                        79.2%; score 19; DB 2; Length 226; 50.0%; Pred. No. 3.5e+02;
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1 LXXYRXXL 8
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himum DB seq length: 0 |ximum DB seq length: 2000000000

Total number of hits satisfying chosen parameters:

100059

100059 seqs, 36664827 residues

Searched:

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 50 summaries

Database : SwissProt_39:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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P16534 pasteurella	Q10159 schizosacch	055171 rattus norv	Q9qyr9 mus musculu	P44788 haemophilus	004658 arabidopsis	Q9qyr7 mus musculu	P49753 homo sapien	088267 rattus norv	055137 mus musculu	P39604 bacillus su		P55039 homo sapien	O35465 mus musculu	Q14318 homo sapien	P27871 paenibacill	P16443 rattus norv

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848 6. 2; not AAL Ly 20 32	s SWISS-PROT entry is copyright. It is p ween the Swiss Institute of Bioinformat European Bioinformatics Institute. The by non-profit institutions as long ified and this statement is not removed. ities requires a license agreement (See send an email to license@isb-sib.ch).	NOI. GEN. GENET. 438:307-362(1993).	NCBI_TaxID=1061; [1] SEQUENCE FROM N.A. SEQUENCE FROM N.A. STRAIN=B10; MEDLINE=93261420; PubMed=8492805; Masepohl B., Angermueller S., Hennecke S., Huebner P., Moreno-Vivian C., Klipp W.; "Nucleotide sequence and genetic analysis of the Rhodobacter capsulatus ORF6-nifUI SVW gene region: possible role of NifW in homocitrate processing";	IT 1 RHOCA STANDARD; PRT; 384 AA. NIFS_RHOCA STANDARD; PRT; 384 AA. Q07177; Q1-QCT-1994 (Rel. 30, Created) Q1-QCT-1994 (Rel. 30, Last sequence update) Q1-QCT-2001 (Rel. 40, Last annotation update) QCYSTEIME DESULFURASE (EC 4.4.1) (NITROGENASE METALLOCLUSTERS BIOSYNTHESIS PROTEIN NIFS). NIFS. Rhodobacter capsulatus (Rhodopseudomonas capsulata). Bacteria; Proteobacteria; alpha subdivision; Rhodobacter group; Rhodobacter Group;

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RESULT
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InterPro; IPROD159; DS_RBD;
InterPro; IPROD0959; RNase_3;
Pfam; PF00035 dSrm; 1
Pfam; PF00035 RIDonuclease_3; 2.
SMART; SM00358; DSRN; 1.
SMART; SM00535; RIBO; 2.
PROSITE; PS00517; DS_RBD; 1.
PROSITE; PS00517; RNASE_3_1; 2.
PROSITE; PS00517; RNASE_3_2; 2.
PROSITE; PS005142; RNASE_3_2; 2.
15-JUL-1998 (Rel. 36, Created)
15-JUL-1998 (Rel. 36, Last sequence update)
                                                                     CPRP_CANPG
P81033;
                                                                                                                                          CANPG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE 412 AA; 47087 MW; E0840881AB87AF84 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hypothetical protein; Hydrolase; Nuclease; Endonuclease DOMAIN 313 388 DRBM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; 281070; CAB03005.1; -. WormPep; F26E4.13; CE09697.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EWBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Submitted (OCT-1996) to the EMBL/GenBank/DDBJ databases.
-!- CATALYTIC ACTIVITY: ENDONUCLEOLYTIC CLEAVAGE TO 5'-PHOSPHO-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-BRISTOL N2;
Lightning J.;
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Rhabditidae; Peloderinae;
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20-AUG-2001 (Rel. 40, Last anotation update)
PUTATIVE RIBONUCLEASE III (EC 3.1.26.3) (RNASE III).
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01-NOV-1997 (Rel. 35, Last seq
20-AUG-2001 (Rel. 40, Last ann
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-1- SIMILARITY: CONTAINS 1 DRBM (DOUBLE-STRANDED RNA-BINDING) DOMAIN.
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                                                                                                                                                                                                                                                                          50 LATYRTAL 57
                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
nes 4; Conserv
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                                                                                                           STANDARD;
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                                                                                                                                                                                                                                                                                                                                                                                                                                    83.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         83.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                 Score 20; DB 1; Length 412
Pred. No. 1.1e+02;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 20; DB 1; Length 384; Pred. No. 1.1e+02; O; Mismatches 4; Indels
                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT;
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                                                                                                           38 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 412;
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                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                         0;
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                                                                                            RESULT 4
RIL13_CL W
RIL13_CL W
AC 0.48513
DT 30-MAY
DT 30-MAY
DT 30-MAY
DT 30-MAY
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OC Chlamy
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   Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
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EMBL, AB009086, BAA23724.1;
Mendel; 27085; Chlsp;2745;27085.
InterPro; IPR001380; Ribosomal_L13E.
Pfam; PF01294; Ribosomal_L13E; 1.
Probom; PF004443; Ribosomal_L13E; 1.
PROSITE; PS01104; RIBOSOMAL_L13E; 1.
                                                                                                                                                                                              This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                              Kanaboshi H., Ikeda K., Miyasaka H.;
"Isolation of several anti-stress genes from the halotolerant green
Chlamydomonas by a simple functional expression screening in E.
Ribosomal protein.
SEQUENCE 208 AA; 23545 MW; F9BB54E2550EA43B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                Submitted (NOV-1997) to the EMBL/GenBank/DDBJ databases. -i- SIMILARITY: BELONGS TO THE L13E FAMILY OF RIBOSOMAL PROTEINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chlamydomonas sp. (strain W80).
Eukaryota; Viridipiantae; Chlorophyta; Chlorophyceae; Volvocales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last annotation update)
60S RIBOSOMAL PROTEIN L13 (BBC1 PROTEIN HOMOLOG).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Neuropeptide; Hori
SEQUENCE 38 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chung J.S., Wilkinson M.C., Webster S.G.;
"Amino acid sequences of both isoforms of crustacean hyperglycemic hormone (CHH) and corresponding precursor-related peptide in Cancer pagurus.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE-Sinus gland;
MEDLINE-99025664; F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eubrachyura; Can
NCBI_TaxID=6755;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cancer pagurus (Rock crab).
Eukaryota; Metazoa; Arthropoda; Crustacea;
Eumalacostraca; Eucarida; Decapoda; Pleocyo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-DEC-1998 (Rel. 37, Last annotation update) CHH PRECURSOR RELATED PEPTIDE (CPRP).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chlamydomonadaceae; Chlamydomonas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RPL13 OR BBC1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI\_TaxID=103365;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13 LASYRGAL 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
4; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ca; Eucarida; Decapoda; Pleocye
Cancroidea; Cancridae; Cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PubMed-9809792;
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50.0%;
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Pred. No. 18;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C979C87EE31ABB90 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pleocyemata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          208 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 1; Length 38; 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Malacostraça;
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Score 19;

DB 1;

Length 208

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Database
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Perfect score:
Sequence:
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Maximum Match
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cximum DB
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Match
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83.3
883.3
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Gapop 10.0 , Gapext 0.5
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24
1 LXXYRXXL 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GenCore version
Copyright (c) 1993 - 2000
                                                                                                                                                                                                                                         sp_rodent:*
sp_virus:*
sp_vertebrate:*
sp_unclassified:*
                                                                                                                                                                                                                                                                                  sp_phage: *
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                                                                                                                                                                                                                                                                                                          sp_mammal:*
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DВ
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100%
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Q9U9Q8
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Q15405
Q9F2U5
Q94900
               Q9UHQ0
Q9UBY4
097972
                                                                       Q9S575
Q53172
Q9X8N5
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Q9JUL0
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                                        Q9XIC2
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Compugen Ltd
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (without alignments)
                                             Ogdwc3 rat cytomeg
Ogugag caenorhabdi
Ogrdq0 streptomyce
Ogs575 pseudomonas
O53172 rhodobacter
Ogs8n5 streptomyce
Ogjg5 neisseria m
Ogjul0 neisseria m
                                                                                                                        Q9h4j8 homo sapien
O15405 homo sapien
Q9f2u5 streptomyce
O94900 homo sapien
              Q9uhq0 homo sapien
Q9uby4 homo sapien
Q97972 oryctolagus
                                                                                                                                                                 Description
023954 gossypium h
)9rul5 deinococcus
                                       29ilu7 pseudomonas
Q9xic2 arabidopsis
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19 19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
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963	8 8 5 5 5 6 9 6 6	748	732	710	706	693	659	597	597	581	566	526	525	525	525	523	508	487	441	440	438	403	401	377	377	366
888	246	212	8 -	3 00	2	œ	10	ν	N	2	S	9	12	12	12	u	w	σı	10	10	10	N	N	10	N	N
Q9RT44 006458	Q9P269 Q3B2B	Q9DT81	Q9DT/6 Q9TJS3	Q35064	Q9A2Q2	Q9TK79	Q9FV60	Q9CDD7	033086	Q9 x 230	Q9W243	Q9T1C5	Q9ELT1	Q9QNA1	089175	018432	Q9P7S7	045012	Q9C5F0	Q9M2E9	Q9FGB9	Q52629	Q48910	29SUU8	Q911T4	оэнхмз
	Q9p269 homo sapien	_	Q9tjs3 pentas lanc	marchantia		Q9tk79 calyptridiu	Q9fv60 zea mays (m	Q9cdd7 mycobacteri		Q9x230 thermotoga		enterobacte		rice grass	089175 rice grassy	018432 geodia cydo	Q9p7s7 schizosacch	0			Q9fgb9 arabidopsis			Q9suu8 arabidopsis	Q9i1t4 pseudomonas	Q9hym3 pseudomonas

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Qy
                                                                                                                 RESULT
                                      Query Match
Best Local Similarity
Matches 4; Conserv
                                                                                                            Submitted (NOV-2000) to the EMBL/GenBank/DDBJ databases.

R EMBL; AL034419; CAB81660.1; ...

R InterPro; IPR000135; Highmoblty_12.

R InterPro; IPR000910; HMG_12_box.

InterPro; IPR000956; P_rich_extensn.

Pfam; PPR00505; HMG_box; 1.

R PRINTS; PR00886; HIGHMOBLTV12.

R PRINTS; PR01217; PRICHEXTENSN.

R SMART; SM00398; HMG; 1.

TON_TER 315 315

SEQUENCE 315 AA; 33204 MW; F77A3178A48A27D5 CRC64;
                                                                                                                                                                                                                                                                                                                                                                    O9H4J8
O9H4J8
O9H4J8;
O9H4J8;
O9H4J8;
O1-MAR-2001 (TrEMBLrel. 16, Created)
O1-MAR-2001 (TrEMBLrel. 16, Last sequence update)
O1-MAR-2001 (TrEMBLrel. 17, Last annotation update)
O1-JUN-2001 (TREMBLREL. 17, Last annotation update)
DJ1108D11.2 (NOVEL HMG (HIGH MOBILITY GROUP) BOX PROTEIN SIMILAR TO
DJ1108D11.2 KIAA0808 AND TNRC9 (CAGF9)) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                  Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A. Clark G.;
1 IXXYRXXI. 8
                                           Conservative
                                                       83.3%;
                                           0,
                                           Score 20; DB Pred. No. 7.7e 0; Mismatches
                                                         DB 4;
7.7e+02;
                                                                       Length 315;
                                            Indels
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Best Local
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01-JAN-1998
01-JUN-2001
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                                                                                                                                                                                                                                                                                                                            Streptomyces coelicolor.

Bacteria; Firmicutes; Actinobacteria; Actinobacteridae;
Bacteria; Streptomycineae; Streptomycetaceae; Streptomyces.

NCBI_TaxID=1902;
                                                                                                                                                                                                                                                                                                                                                                                                                                              01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2001 (TrEMBLrel. 16, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Margolis R.L., Abraham M.R., Gatchell S.B., Li S.H., Kidwai A.S., Breschel T.S., Stine O.C., Callahan C., Mcinnis M.G., Ross C.A., "CDNAs with long Cad trinucleotide repeats from human brain."; hum. Genet. 100:114-122(1997).

EMBL: U80736, AAB91435.1; EMBL: U80736, AAB91435.1; EMBL: U80736, AAB91435.1; EMBL: U80736, AAB91435.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
SEQUENCE FROM N.A.
STRAIN-A3(2):
STRAIN-A3(2):
STRAIN-A3(2):
PubMed-8843436;
Redenbach M., Kieser H.M., Denapaite D.,
Kinashi.H., Hopwood D.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; TPR000135; Highmoblty_12.
InterPro; IPR000910; HMG_12_box.
Pfam; PF00505; HMG_box; I.
PRINTS; PR00886; HIGHWOBLTY12.
SMART; SM00398; HMG; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGF9 (FRAGMENT).
                                                                                                                      Cerdeno A.M., Parkhill J., Barrell B.G., Rajandream M.A.; Submitted (SEP-2000) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                   STRAIN-A3(2);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE 331 AA;
                                                                                                                                                               STRAIN-A3(2);
                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                             Submitted (SEP-2000) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                  PUTATIVE ATP-BINDING PROTEIN.
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(TrEMBLrel. 05, Last sequence update)
(TrEMBLrel. 17, Last annotation update)
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50.0%;
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Pred. No. 8.2e+02;
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                     Eichner A., Cullum
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"~+~hes 4; Conserva
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Best Local S
Matches 4
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"Prediction of the coding sequences of unidentified human genes. XI. The complete sequences of 100 new cDNA clones from brain which code for large proteins in vitro.";
DNA Res. 5:277-286(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAY-1999 (TIEMBLrel. 10, Created)
01-WAY-1999 (TIEMBLrel. 10, Last sequence update)
01-UNV-2001 (TIEMBLrel. 17, Last annotation update)
KIAA0808 PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 094900;
Rat cytomegalovirus (strain Maastricht) 
Viruses; dsDNA viruses, no RNA stage; H 
Betaherpesvirinae; Muromegalovirus. 
NCBI_TaxID=79700; 
[1]
                                                                                                                                       01-MAR-2001 (TrEMBLrel. 16, 01-MAR-2001 (TrEMBLrel. 16, 01-JUN-2001 (TrEMBLrel. 17,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
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SMART; SM00398; HMG; 1.
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InterPro; IPR000910; HMG_12_box.
Pfam; PF00505; HMG_box; 1.
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MEDLINE=99087487; PubMed=9872452;
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                                                                                                                                                                                                                                                                                                                              325 LAAYRASL 332
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                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 50. nes 4; Conservative
                                                                                                                                                                                                                                                                                                                                                                       1 LXXYRXXL 8
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                                                                                                                                                                                                                             PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 57513 MW;
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                                                             Herpesviridae;
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"A set of ordered cosmids and a detailed genetic and physical map for the 8 Mb Streptomyces coelicolor A3(2) chromosome.";
Mol. Microbiol. 21:77-96(1996).
EMBL, AL392146; CAC08270.1; -.
SEQUENCE 490 AA; 53788 MW; 46BCD7DAC178FBAB CRC64;
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0; Gaps 0

Homo sapiens (Human). Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

Suyama M., Kikuno R., Miyajima N., Tanaka A.,

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 50 summaries
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Gapop 10.0 , Gapext 0.5
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Copyright (c) 1993 - 2000
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Arabidopsis thalia	AAG29713	21	219	79.2	19	11
Restin protein seq	AAY18410 AAW90876	2 2	191	79.2	61 61	10
Human restin prote	AAY22227	20	181	79.2	19	ο α
Human endostatin S	AAB49382	22	180	79.2	19	7
Human HMW endostat	AAW90875	21	176	79.2	19	6
Peptide #465 encod	AAM01783	22	42	79.2	19	Çī
Peptide #486 encod	AAM26449	22	42	79.2	19	4
Peptide #477 encod	AAM14043	22	42	79.2	19	ω
Human polypeptide	AAM39667	22	576	83.3	20	N
Human polypeptide	AAM41453	22	388	83.3	20	1
Description	ID	BB	Query Match Length DB	Query	Score	Result No.

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21	21	21	17	17	22	22	10	21	20	20	21	20	21	22	21	21	20	20	22	21	20	20	20	22	21	22	15	15	15	12	22	22	17	20	21	21	22	22
AAG04689	AAG55842	AAB38583	AAR93611	AAR97830	AAB20102	AAB62651	AAP91380	AAG33864	AAY12157	AAW88842	AAG55843	AAY37778	AAB15367	AAM25654	AAG01677	AAG00511	AAY16644	AAY16643	AAM39497	AAG01676	AAY16641	AAY16642	AAY19484	AAG73544	AAG55104	AAG98758	AAR48309	AAR48304	AAR48303	AAR13244	AAE04362	AAU00691	AAR84082	AAY33686	AAG29711	AAG29712	AAB73519	AAG74897
Arabidopsis thalia	Arabidopsis thalia	ŗ	Kaposi's sarcoma a	Kaposi's sarcoma a	Pig motilin. Sus	Motilin receptor,	Porcine prepromoti	Arabidopsis thalia	Human 5' EST secre	Polypeptide fragme		Amino acid sequenc	Murine erythroid d	fn.	Human secreted pro		W09914235 Seq ID N	W09914235 Seq ID N	Human polypeptide		WO9914235 Seq ID N	S	Amino acid sequenc	Human colon cancer	Arabidopsis thalia				Antiinflammatory p	nsin an	Human kinase (PKIN	Ephrin type-A rece		S. erythraea pFL37	-	Arabidopsis thalia	1	Human colon cancer

ALIGNMENTS

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RESULT
AAM41453
  21-JAN-2000;
25-APR-2000;
09-JUL-2000;
19-JUL-2000;
                                                                                                                                                                             Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer peripheral nervous system; neuropathy; central nervous system; CNS; Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
                                                                                                                                                                                                                                                          Human polypeptide SEQ ID NO 6384.
                                                                                                                                                                                                                                                                                                                                      AAM41453 standard; Protein; 388
                                                                                                                  WO200153312-A1.
                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                   22-OCT-2001 (first entry)
                                                                                          26-JUL-2001.
                                                                                                                                                                  leukaemia.
                                                                26-DEC-2000; 2000WO-US34263.
; 2000US-0488725.
; 2000US-0552317.
; 2000US-0598042.
; 2000US-0620312.
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AAM39667
AAM39667
XX AAM3
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Wang J,
Zhao QA,
                             26-DEC-2000; 2000WO-US34263.
                                                                                                                                                               WO200153312-A1
                                                                                                                                                                                                                                                                                                                Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer; peripheral nervous system; neuropathy; central nervous system; CNS; Alzhelmer's; Parkinson's disease; Huntington's disease; haemostatic; amyotrophic lateral sclerosis; SNy-Drager Syndrome; chemotactic; chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human polypeptide SEQ ID NO 2812.
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Note: The sequence data for this patent did not form part of the printed
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14-SEP-2000; 2000US-0662191
19-OCT-2000; 2000US-0693036
29-NOV-2000; 2000US-0727344
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Zhou P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    388 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    83.3%; Score 20; DB 22; Length 388; 50.0%; Pred. No. 9.7e+02; Live 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Qian XB,
Yang Y,
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2hang J;
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RESULT
AAM14043
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25-APR-2000; 2000US-0552317,
09-JUL-2000; 2000US-0598042,
19-JUL-2000; 2000US-062312,
03-AUG-2000; 2000US-0633450,
14-SEP-2000; 2000US-0662191,
19-CCT-2000; 2000US-0693036,
29-NOV-2000; 2000US-0727344.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to human nucleic acids (AAI57798-AAI61369) and the encoded polypeptides (AAM3642-AAM42213) with nootropic, immunosuppressant and cytostatic activity. The polynucleotides are useful in gene therapy. A composition containing a polypeptide or polynucleotide of the invention may be used to treat diseases of the peripheral nervous system, such as peripheral nervous injuries, peripheral neuropathy and localised neuropathies and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral solerosis, and Shy-Drager Syndrome. Other uses include the utilisation of the activity, centendactic/chemokinetic activity, haemostatic and thrombolytic activity, center diagnosis and therapy, drug screening, assays for receptor activity, arthritis and inflammation, leukaemias and c.N.S discreters
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tang YT,
Wang J,
Zhao QA,
            30-JAN-2001; 2001WO-US00670.
                                          09-AUG-2001.
                                                                                                                                                                         Peptide #477 encoded by probe for measuring cervical gene expression
                                                                                                                                                                                                           12-OCT-2001
                                                                                                                                                                                                                                       AAM14043;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C.N.S disorders. Note: The sequence data for this patent did not form part of the printed
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N-PSDB; AAI58823.
                                                                       WO200157278-A2
                                                                                                   Homo sapiens
                                                                                                                                 cervical cancer.
                                                                                                                                             Probe; human; microarray; gene expression; cervical epithelial cell;
                                                                                                                                                                                                                                                                 AAM14043 standard; Protein; 42 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 4; SEQ ID NO 2812; 10078pp; English.
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                                                                                                                                                                                                                                                                                                                                          319 laayrasl 326
                                                                                                                                                                                                                                                                                                                                                                      1 LXXYRXXL 8
                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
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Zhou P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              576 AA;
                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Asundi V, Chen R, Ma Y, Wehrman T, Xu C, Xue AJ, Goodrich R, Drmanac RT;
                                                                                                                                                                                                                                                                                                                                                                                                                83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                  Score 20;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                DB 22;
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Yang Y,
                                                                                                                                                                                                                                                                                                                                                                                                                               Length 576;
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Zhang J;
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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 50 summaries
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ximum DB seq
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     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
    protein search, using sw model
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length: 2000000000
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   Gapop 10.0 , Gapext 0.5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       212252 seqs, 22503292 residues
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24
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Copyright (c) 1993 - 2000 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                    /cgn2_6/ptcdata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptcdata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptcdata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptcdata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptcdata/1/iaa/B_COMB.pep:*
/cgn2_6/ptcdata/1/iaa/backfiles1.pep:*
                                                                                                                                                                                                                                                                                                        Length
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 US-09-461-697-314
US-08-519-777-19
US-08-742-035-19
US-08-777-019-12
US-08-777-019-12
US-08-777-143-19
US-08-775-414-19
US-08-775-414-19
US-08-931-858E-19
US-08-931-858E-22
US-08-981-739-19
US-08-777-019-23
US-08-777-019-23
US-08-777-019-23
US-08-777-019-23
US-08-777-019-23
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US-08-537-002A-3

US-08-863-010-3

US-09-024-429-3
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3, Appli
19, Appl
22, Appl
19, Appl
22, Appl
22, Appl
23, Appl
24, Appl
23, Appl
23, Appl
23, Appl
23, Appl
23, Appl
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sequence o, Appit	0	80	Sequence 8, Appli	Sequence 3, Appli	`	•	Sequence 81, Appl	•	Sequence 23, Appl	-	Sequence 23, Appl	Sequence 4, Appli	`	Sequence 23, Appl	Sequence 24, Appl	•	Sequence 24, Appl	•	Sequence 24, Appl				

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; MOLECULE TYPE: US-08-852-401-3
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GENERAL INFORMATION:
                                                                                                                              TELEFAX: 312-616-5460 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 4700
STREET: 4700
CITY: Chicago
STATE: Illinois
STATE: U.S.A.
                                                                                                                                                                                                    CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Mueller, Lisa L.
REGISTRATION NUMBER: 38,9
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                TELECOMMUNICATION INFORMATION: TELEPHONE: 312-616-5400 TELEFAX: 312-616-5460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Weber, Paul E.
APPLICANT: Hessler, Paul E.
APPLICANT: Larsen, Peter E.
Minh
                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 526 amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Luu, B. Minh
TITLE OF INVENTION: Met.
TITLE OF INVENTION: ETY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                   TYPE: amino acid
STRANDEDNESS: sir
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 60601
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                                                                                         526 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3: Rockey, Milnamow & Katz, Ltd.
2 Prudential Plaza, 180 N. Stetson,
                                                    single
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5
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TELEFA: 202.,.
TELEFA: 248633
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 963 amino acids
TYPE: amino acid
TYPE: amino acid
                            US-08-863-010-3
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Best Local Similarity 50...
1-hog 4; Conservative
  Sequence 3, Application US/08863010
                                                                                                                                                                                                  Query Match 79.2%; Score 19; DB 1; Length 963; Best Local Similarity 50.0%; Pred. No. 1.3e+03; Matches 4; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/537,002A
FILING DATE: 29-SEP-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 260984/1994
FILING DATE: 01-OCT-1994
PRIOR APPLICATION NUMBER: JP NO. 5773282 yet received
FILING DATE: 08-SEP-1995
APPLICATION NUMBER: JP NO. 5773282 yet received
FILING DATE: 08-SEP-1995
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 75/618
REFERENCE/DOCKET NUMBER: TSUSAKI-1
TELECOMMUNICATION INFORMATION:
TELECHONE: 202-638-5197
TELECRAY: 246632
TELECRAY: 246632
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Patent No. 5773282
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY: USA
ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: TSUSAKI, Keiji
APPLICANT: KUBOTA, Michio
APPLICANT: SUGINOTO, Toshiyuki
APPLICANT: SUGINOTO, TOSHIYUKi
TITLE OF INVENTION: RECOMBINANT THERMOSTABLE ENZYME FOR
TITLE OF INVENTION: CONVERTING MALTOSE INTO TREHALOSE
NUMBER OF SEQUENCES: 17
CORRESSPONDENCE ADDRESS:
ADDRESSEE: BRONDY AND NEIMARK
STREET: 419 Seventh Street, N.W., Suite 300
                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: peptide
                                                                                                                   912 LQAYRSAL 919
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CITY: Washington
STATE: D.C.
                                                                                                                                                            1 LXXYRXXL 8
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; TOPOLOGY: line
; MOLECULE TYPE: p
US-08-863-010-3
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                                                                                                                                                                                                                                                                        US-09-024-429-3
                 Sequence 3, Application US/09024429
Patent No. 6165768
GENERAL INFORMATION:
APPLICANT: TSUSAKI, Keiji
APPLICANT: SUGJIMOTO, MICHIO
APPLICANT: SUGJIMOTO, TOSHIYUKI
APPLICANT: SUGJIMOTO, TOSHIYUKI
TITLE OF INVENTION: RECOMBINANT THERMOSTABLE ENZYME FOR
TITLE OF INVENTION: ROUVERTING MALTOSE INTO TREHALOSE
NUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESS:
ADDRESSE: BROWDY AND NEIMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/537,002
APPLICATION NUMBER: US 08/537,002
FILING DATE: 29-SEP-1995
APPLICATION NUMBER: JP 260984/1994
FILING DATE: 01-OCT-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP NO. 6087146 yet received FILING DATE: 08-SEP-1995
ATTORNEY/AGENT INFORMATION:
NAME: BEDGATE US DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
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GENERAL INFORMATION:
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SEQUENCE CHARACTERISTICS:
LENGTH: 963 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER: 75U
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
TELEFAX: 202-737-3528
TELEX: 24843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOUTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/863,010
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APPLICANT: KUBOTA, Michio
APPLICANT: SUGIMOTO, Toshiyuki
TITLE OF INVENTION: RECOMBINANT THERMOSTABLE ENZYME FOR
TITLE OF INVENTION: CONVERTING MALTOSE INTO TREHALOSE
NUMBER OF SEQUENCES: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY AND NEIMARK
STREET: 419 Seventh Street, N.W., Suite 300
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Local Similarity 50.0%;
les 4; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: BROWDY, Roger L. REGISTRATION NUMBER: 2
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V: USA
419 Seventh Street, N.W., Suite 300
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    Mismatches

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Pred. No. 1.3e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 3; Length 963;
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0; Gaps

0

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OM protein -
                                 on:
                                                            protein search, using sw model
                               April 21,
                                                                                                          GenCore version
Copyright (c) 1993 - 2000
                               2002, 10:17:58;
Search time 102.84 Seconds (without alignments) 5.185 Million cell update
                                                                                                              4.5
Compugen Ltd
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cell updates/sec

Title: Perfect score: Sequence: US-09-281-760C-4 35 TLLEYRM 7

Scoring table: Gapop 10.0 , Gapext 0.5 BLOSUM62

Searched: 219241 seqs, 76174552 residues

Total number of hits satisfying chosen parameters: 219241

pimum DB seq length: 0 ximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 50 summaries

pir1:*
pir2:*
pir3:*
pir4:*

Database

PIR_68:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	σ	4	ω	2	L .	No.	
27	27	27	28	28	28	28	28	28	28	28	28	28	28	29	29	29	29	29	29	29	29	30	30	30	30	30	30	30	Score	
77.1	•	•	•	80.0		•	•	80.0	•	•	•	•	٠	•	82.9	•	٠	٠	•	•	٠	85.7	85.7	85.7	85.7	85.7	85.7	85.7	Match	d
216	214	126	919	851	617	526	526	526	526	501	501	256	223	2150	988	631	531	388	344	315	267	2368	421	326	324	308	308	171	Length	
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г	æ		hypothetical prote	5		capsid	outer capsid prote		ģ	cytochrome P450 3A	cytochrome P450 3A	conserved hypothet	probable membrane		=		_	_	•		Pr	ESR1 protein - yea	77		hypothetical prote	3	ical	potheti	Description	

50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	3 5	34	3 3	32	31	30
26	26	26	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27
74.3						74.3			77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
318	313	290	282	255	237	82	82	82	1160	783	653	653	594	576	386	384	384	353	265	246
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T02288	T23675	S50050	JC7333	S74068	T10629	I50986	I50984	I50968	T00272	T38690	T51244	T47581	D71347	A84898	F82721	D81007	F82030	A41558	T20127	G64166
_	hypothetical prote	hypothetical prote	multicystatin - cc	hypothetical prote	hypothetical prote	MHC class II beta	MHC class II beta	MHC class II beta	hypothetical prote	probable regulator	SCARECROW protein	SCARECROW1 - Arabi	conserved hypothet	hypothetical prote	two-component syst	GTP-binding protei	probable GTP-bindi	N-syndecan - rat	hypothetical prote	heme export protei

ALIGNMENTS

A;Cross-references: GB:AE005176; NID:g12723950; PIDN:AAK05101.1; GSPDB:GN00146 A;Experimental source: strain IL1403 C;Genetics: C;Accession: C86750
R;Bolotin, A.; Wincker, P.; Mauger, S.; Jaillon, O.; Malarme, K.; Weissenbach, Genome Res. in press, 2001
A;Title: The complete genome sequence of the lactic acid bacterium.
A;Reference number: A86625
A;Accession: C86750 В VΩ hypothetical protein ykdA [imported] - Lactococcus lactis subsp. lactis (strain IL140 C;Species: Lactococcus lactis subsp. lactis C;Date: 23-Mar-2001 #sequence_revision 23-Mar-2001 #text_change 23-Mar-2001 A;Gene: A; Molecule type: DNA A; Residues: 1-171 <STO> A; Status: preliminary Best Local Similarity
Matches 6; Conserv Query Match 145 TLLEYR 150 ykdA 1 TLLEYR 6 Conservative 85.7%; 100.0%; 0; Score 30; DB; Pred. No. 13; Mismatches 2; 0; Length 171; Indels 0; Gaps 0 ٦ ; 탈

RESULT H65035

hypothetical protein srmB-ung intergenic region - Escherichia coli (strain K-12) C;Species: Escherichia coli (C;Species: Escherichia coli (C;Date: 17-Sep-1997 #sequence_revision 17-Sep-1997 #text_change 17-Mar-2000 C;Accession: H65035

R;Blattner, F.R.; Plunkett III, G.; Bloch, C.A.; Perna, N.T.; Burland, V.; Riley, M.; A.; Rose, D.J.; Mau, B.; Shao, Y.
Science 277, 1453-1462, 1997
A;Title: The complete genome sequence of Escherichia coli K-12.
A;Reference number: A64720; MUID:97426617
A;Accession: H65035

A;Status: preliminary; nucleic acid sequence not shown; translation A;Molecule type: DNA A;Residues: 1-308 <BLAT>

not shown

A;Cross-references: GB:AE000344; GB:U00096; NID:g1788927; PIDN:AAC75630.1; PID:g17889 A;Experimental source: strain K-12, substrain MG1655 C;Genetics:

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A; Gene: Rv2714
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A;Residues: 1-308 <570>
A;Residues: 1-308 <570>
A;Cross-references: GB:AE005174; NID:g12516998; PIDN:AAG57693.1; GSPDB:GN00145; UWGP:Z38
A;Experimental source: strain 0157:H7, substrain EDL933
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Date: 16-Feb-2001 #sequence_revision 16-Feb-2001 #text_change 31-Mar-2001
;Accession: A85904
R;Perna, N.T.; Plunkett III, G.; Burland, V.; Mau, B.; Glasner, J.D.; Rose, D.J.; Mayhew iller, L.; Grotbeck, E.J.; Davis, N.W.; Lim, A.; Dimalanta, E.; Potamousis, K.; Apodaca, Nature 409, 529-533, 2001
A;Title: Genome sequence of enterohemorrhagic Escherichia coli 0157:H7.
A;Reference number: A85480; MUID:21074935; PMID:11206551
A;Accession: A85904
                                                                                                                                                                                                A;Cross-references: GB:296072; GB:AL123456; NID:g3261793; PIDN:CAB09474.1; PID:e320946; A;Experimental source: strain H37Rv
                                                                                                                                                                                                                                   A; Molecule type: DNA
A; Residues: 1-324 <COL>
                                                                                                                                                                                                                                                               A; Status: preliminary; nucleic acid sequence not shown; translation not shown
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C:Species: Escherichia coli
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C;Superfamily: Pseudomonas putida regulatory protein catR
                                                                             Matches
                                                                                                           Query Match
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Best Local Similarity
    194 LLEYRM 199
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                                                                           Local Similarity es 6; Conserv
                                      2 LLEYRM 7
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                                                                    85.7%; Score 30; DB
100.0%; Pred. No. 26;
tive 0; Mismatches
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 Mismatches

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A;Cross-references: EMBL:Z36005; NID:g536429; PIDN:CAA85094.1; PID:g536430; MIPS:YBR1
A;Experimental source: strain S288C
                                  A; Molecule type: DNA
A; Residues: 1-2368 <BEC>
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Best Local Similarity
6; Conserv
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A; Residues: 1-421 <URR>
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A; Residues: 1-326 <SMI>
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Best Local :
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nes 6; Conserv
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BSR1 protein - yeast (Saccharomyces cerevisiae)
N,Alternate names: MEC1 protein; protein YBR1012; protein YBR136w
C;Species: Saccharomyces cerevisiae
C;Date: 26-Aug-1994 #sequence_revision Cyactes: 26-Aug-1994 #sequence_revision Cyaccession: S4605; S4558; S46663; S47954; S64650
C;Accession: S46005
R;Becam, A.M.; Herbert, C.J.; Nasr, F.; Slonimski, P.P.; Zagulski, M. submitted to the Protein Sequence Database, August 1994
A;Reference number: S45995
A;Accession: S46005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 6
$38110
O-staloglycoprotein endopeptidase homolog YKR038c - yeast (Saccharomyces cerevisiae)
O-staloglycoprotein endopeptidase homolog YKR038c - yeast (Saccharomyces cerevisiae)
C;Species: Saccharomyces cerevisiae
C;Date: 03-May-1994 #sequence_revision 03-May-1994 #text_change 11-Jan-2000
C;Accession: $38110
C;Accession: $38110
R;Urrestarazu, L.A.; Jauniaux, J.C.
submitted to the Protein Sequence Database, March 1994
A;Reference number: $38097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A:Map position: 11R
C:Superfamily: O-sialoglycoprotein endopeptidase
C:Keywords: calcium binding; EF hand
E:271-283/Domain: calcium binding #status predicted <CAl>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         hypothetical protein B2235_F1_6 - Mycobacterium leprae C; Species: Mycobacterium leprae C; Species: Mycobacterium leprae C; Date: 19-Mar-1997 #sequence_revision 25-Apr-1997 #text_change 23-Mar-2001 C; Accession: S72945
R; Smith, D.R.; Robison, K.
submitted to the EMBL Data Library, November 1993
A; Description: Mycobacterium leprae cosmid B2235.
A; Reference number: S72587
A; Accession: S72945
B; Staterior. S72945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: EMBL:Z28263; NID:g486476; PID:g486477; MIPS:YKR038c
A;Experimental source: strain S288C
C;Genetics:
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Title:
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Maximum Match 100%
Listing first 50 summaries
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                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JUN-1994 (Rel. 29, Created)
01-JUN-1994 (Rel. 29, Last sequence update)
30-MAX-2000 (Rel. 39, Last annotation updat-
HYPOTHETICAL 46.6 KDA PROTEIN IN DALBO-GAP1
                  PIR: 538110; 538110

SGD; 50001746; YKR038C.

"InterPro; IPR000905; Peptidase_M22.

Pfam; PF00814; Peptidase_M22; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                         Urrestarazu L.A., Jauniaux J.-C.;
Submitted (MAR-1994) to the EMBL/GenBank/DDBJ databases
-i-FUNCTION: COULD BE A METALLOPROTEASE.
-i- CORACTOR: ZINC (PROBABLE).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 use by non-profit institute. There are no restrictions on its modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-slb.ch/announce/or send an email to license@isb-slb.ch).
PRINTS; PR00789;
                                                                                                                            EMBL; Z28263; CAA82112.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Saccharomyces cerevisiae (Baker's yeast).
Bukaryota: Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
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PROSITE: PS00044; HTH_LYSR_FAMILY; 1
Hypothetical protein: Transcription regulation; DNA-binding;
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EMBL: D64044; ; NOT_ANNOTATED_CDS.
EMBL: AE000344; AAC75630.1; ALT_INIT
EMBL: D90886; BAA20920.1; -
ECOCene; EG11785; Y1E.
ECOCene; EG11785; Y1E.
InterPro: IPR000847; HTH_LYSR.
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KDA PROTEIN IN DALBO-GAP1 INTERGENIC REGION
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EMBL; X75891; CAA53494.1; -.
EMBL; U31109; AAA74482.1; -.
EMBL; 236005; CAA8594.1; -.
EMBL; 236005; CA68594.1; -.
EMBL; 236005; CA68594.1; -.
PIR; S465078. S45678.
SGD; S0000340; MEC1.
                                                                                                                                use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                the European Bioinformatics Institute. The use by non-profit institutions as long
                                                                                                                                                                                                                                                                 -i- DEVELOPMENTAL STAGE: INDUCED DURING MEIGSIS.
-i- SIMILARITY: IN THE N-TERMINAL REGION, TO S.POMBE C
-i- SIMILARITY: BELONGS TO THE PI3/PI4-KINASES FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-94378717; PubMed-8091856;
Becam A.-M., Cullin C., Grzybowska E., Lacroute F., Nasr F.
Ozier-Kalogeropoulos O., Palucha A., Slonimski P.P., Zaguls
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A. SEQUENCE FROM N.A. Harlow D.;
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938111; 002580;
01-CCT-1994 (Rel. 30, Created)
01-CCT-1994 (Rel. 30, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
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PROSTTE; PS01016; GLYCOPROTEASE; 1.
Hypothetical protein; Hydrolase; Metalloprotease; Zinc.
METAL 176 176
METAL 180 180 ZINC (POTENTIAL).
SEQUENCE 421 AA; 46602 MW; 057211498C22277F CRC64;
                                                                                                                                                                                                                                  This SWISS-PROT entry is copyright. It is produced through a collaboration
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ESRI OR MECI OR SAD3 OR YBR136W OR YBR1012.
Saccharomyces cerevisiae (Baker's yeast).
Saccharomycota; Fungi; Ascomycota; Saccharomycot;
Eukaryota; Fungi; Ascomycota; Saccharomycot;
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026335 methanobact
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09cpb9 pasteurella
09lcy8 thermus aqu
09ty15 caenorhabdi
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Q9u398 caenorhabdi
O94418 schizosacch
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Q9lpr4 arabidopsis
Q37086 peach roset
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Matches 6; Conserv
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Q9JN51;
01-OCT-2000
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                                                             "Six putative two-component regulatory systems isolated from Lactococcus lactis subsp. cremoris MG1363."; Microbiology 146:935-947(2000).
EMBL; U81488; AAF66143.1; -. SEQUENCE 171 AA; 19171 MW; 3D16FAD7BFF83819 CRC64;
                                                                                                                                                                                                             O'Connell-Motherway M., Fitzgerald G.F., van Sinderen D.;
"Cloning and sequence analysis of putative histidine protein isolated from Lactococcus lactis MG1363.",
Appl. Environ. Microbiol. 63:2454-2459(1997).
                                                                                                                                 O'Connell-Motherway M., van Sinderen D., Fitzgerald G.F., Ehrlich S.D., Morel P.;
                                                                                                                                                           MEDLINE=20244638; PubMed=10784052;
                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                STRAIN=MG1363;
MEDLINE=97316457; PubMed=9172368;
                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
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 Conservative
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            85.7%;
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Bacillus/Clostridium group; Streptococcaceae;
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             Score 30;
Pred. No.
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RX MEDLINE=99295987; PubMed=9634230;
RA COLE S.T., Brosch R., Parkhill J., Garnier T., Churcher C., Harris D.,
RA Gordon S.V., Eiglmeier K., Gas S., Barry C.E. III, Tekaia F.,
RA Gordon S.V., Eiglmeier K., Gas S., Barry C.E. III, Tekaia F.,
RA Badcock K., Basham D., Brown D., Chillingworth T., Connor R.,
RA Davies R., Devlin K., Feltwell T., Gentles S., Hamiln N., Holroyd S.,
RA Hornsby T., Jagels K., Krogh A., McLean J., Moule S., Murphy L.,
RA Cliver S., Osborne J., Quail M.A., Rajandream M.A., Rogers J.,
RA Cliver S., Seeger K., Skelton S., Squares S., Sqares R., Sulston J.E.,
RA Taylor K., Whitehead S., Barrell B.G.,
"Deciphering the biology of Mycobacterium tuberculosis from the
"Deciphering the biology" of Mycobacterium tuberculosis from 
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Q9CGT9;
Q1-JUN-2001 (TrEMBLrel. 17, Created)
Q1-JUN-2001 (TrEMBLrel. 17, Last sequence update)
Q1-JUN-2001 (TrEMBLrel. 17, Last annotation update)
UNKNOWN PROTEIN.
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01-JUL-1997 (TrEMBLrel. 04, Last sequence update)
01-JUN-2000 (TrEMBLrel. 14, Last annotation update)
HYPOTHETICAL 35.5 KDA PROTEIN.
RY2714 OR MTCY05A6.35.
Mycobacterium tuberculosis.
Bacteria; Firmicutes; Actinobacteria; Actinobacteridae;
Bacteria; Firmicutes; Actinobacteria; Mycobacteriaceae; Mycobacterium.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Complete proteome. SEQUENCE 171 AA; 19216 MW;
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EMBL; AE006334; AAK05101.1; -.
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Bacteria; Firmicutes; Bacillus/Clostridium group; Streptococcaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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Best Local
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                                                                                                        Q9CPB9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Massive gene decay in the leprosy bacillus."; Nature 409:1007-1011(2001). EMBL; U00019; AAA17281.1; -. EMBL; AL583920; CAC31390.1; -.
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01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-NOV-1996 (TrEMBLrel. 17, Last annotation update)
B2235_F1_6 (HYPOTHETICAL PROTEIN ML1009).
   FECD.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hypothetical protein; Complete proteome. SEQUENCE 326 AA; 36152 MW; D089CF228598C722 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mycobacterium leprae.
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Maximum Match 100%
Listing first 50 summaries
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kimum DB seq length: 2000000000
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Gapop 10.0 , Gapext 0.5
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                                                   Immunogenic peptid
Antibody 8H.8 bind
Yeast glycoproteas
Yeast checkpoint c
Yeast MEC1 protein
Soybean 2-isopropy
Transposase from g
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AAB95845 AAY68821 AAW38757 AAU00611 AAB44726 AAG08015 AAG08014 AAB61578 AAW11784	AAB43458 AAB437911 AAM37911 AAM31445 AAB3178 AAB438178 AAB428569 AAM40412 AAB42197 AAB610183 AAG10183 AAG40522 AAB79400 AAB79401	AAP60980 AAB58532
Human protein sequence Amino acid sequence Phosphatidyl inosi VH ligand-binding Human secreted pro Arabidopsis thalia Arabidopsis thalia Polynavirus protei Early onset Alzhei	Human cancer assoc Peptide #11948 enc Peptide #5438 enco Peptide #5482 enco Peptide #5482 enco Peptide #5482 enco Peptide #5482 enco Peptide #5482 enco Peptide Human polypeptide Human polypeptide Human secreted pro Arabidopsis thalia Arabidopsis thalia Arabidopsis thalia C glutamicum prote Corynebacterium gl Corynebacterium gl Arabidopsis thalia C glutamicum prote Corynebacterium prote Arabidopsis thalia C. pneumoniae prot Human protein sequ	ide whi ncer as

ALIGNMENTS

AAY69584 ID AAY6

AAY69584 standard; peptide;

7 A

19-APR-2000 AAY69584;

(first entry)

Immunogenic peptide SEQ ID NO:9, for anti-IgE autoantibody generation.

RESULT

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Human protein sequ
peptid
           AC XXX AC
           WPI; 2000-118182/11.
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30-MAR-1999;
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allergy; canine; prophylaxis; treatment.
                                                                                                          Lawton R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-APR-1999;
                                                                                                                                                                                                               (IDEX-) IDEXX LAB INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-NOV-1999
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                                                                                                          Mermer B,
                                                                                                                                                                                                                                                                                                                         98US-0058332.
99US-0281761.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99EP-0107020
                                                                                                               Francoeur G;
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421 2368 2368 545 988 135 135 104

18 20 20 13 20 22 22 22

AAR24302 AAY41237 AAW73893 AAY26187

AAW26663

AAB93395 AAB94147

AAY49789

Elastolytic

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Sequences AAY69576-Y69586 and AAY69598-Y69599 represent peptides that may CC be used to induce anti-IgE (immunoglobulin E) autoantibodies in a dog. CC IgE is an important mediator of canine allergic responses, including Type CC Immediate hypersensitivity. It is estimated that up to 30% of all dogs CC suffer from allergies or allergy-related skin disorders, and allergic CC dermatitis is thought to affect between 3 and 15% of dogs. Common canine CC allergen, the IgE binds to receptors on mast cells. The IgE molecules CC allergen, the IgE binds to receptors on mast cells. The IgE molecules CC can then become cross-linked, which induces the mast cells to release histamine, which leads to the manifestation of allergic symptoms. The peptides of the invention correspond to epitopes of canine IgE, or conservative variations thereof, that are accessible in circulating IgE bund to mast cells. The autoantibodies produced on conservative variations thereof, that are accession only circulating IgE, CC which would exacerbate an ongoing allergic response even in the absence CC ef allergen. Anti-IgE autoantibody induction results in an immune cresponse that targets the IgE-expressing B cell, which affects IgE contents in a dog.

CC the IgE-producing B cell for destruction. The peptides of the invention cresponse in the absence contents in a dog.
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Best Local (
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Binding proteins used for treatment or prophylaxis of canine allergy
                                                                                                                                                                                                                                                                                                                                                                   09-APR-1999;
                                                                       WPI; 2000-040833/04.
                                                                                                                                      Lawton R,
                                                                                                                                                                                                      (IDEX-) IDEXX LAB INC.
                                                                                                                                                                                                                                                                                                   09-APR-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antibody 8H.8 binding mimotope 1.
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99US-0281760
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                                                                                                                                  Francoeur G;
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              The invention provides a new human protein with glycoprotease activity. The protein can be expressed by standard recombinant methodology. The glycoprotease-like protein can be used; to screen for specific-binding agents (receptors or ligands) or inhibitors or agonists of its binding interactions; to raise antibodies or elicit an immune response; as a tissue marker; as a nutrient source or supplement; as a research reagent; and as a therapeutic/biologically active agent, e.g. for regulating cell proliferation or differentiation; as immunostimulant or immunosuppressant; as thrombotic agent; for stimulation of tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Glycoprotease; glycoprotease-like protein; cell proliferation; human; immunostimulant; immunosuppressant; thrombotic agent; tissue growth; contraceptive; fertility-promoting agent; hematopoiesis; antimicrobial; anti-inflammatory; anti-tumour; gene therapy; yeast.
                                                                                                                                                                                                       Disclosure; Page 35; 55pp; English.
                                                                                                                                                                                                                                     A human protein with glycoprotease-like activity, used for diagnosis, treatment and prevention of e.g. autoimmune disease or cancer - \,
                                                                                                                                                                                                                                                                                                   WPI; 2000-147211/13.
                                                                                                                                                                                                                                                                                                                                       Kato S,
                                                                                                                                                                                                                                                                                                                                                                                                                                 25-JUN-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Saccharomyces cerevisiae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Yeast glycoprotease-like protein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         can be used for prophylaxis or tredulent or contains the method of the AAY50876-Y50900 represent peptide mimotopes used in the method of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This invention describes a novel binding protein which specifically binds to native canine free or B-cell bound IgE, and which doesn't bind to IgE when the IgE is bound to mast cells. The peptide products of the invention have anti-allergic activity. The antibodies bind to defined. epitopes on free or B-cell bound IgE molecules which have an important role in allergic reaction. The specific binding proteins are used to produce a pharmaceutical composition, preferably with a diluent, which can be used for prophylaxis or treatment of canine allergy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 9; Page 12; 30pp; English.
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as contraceptive/fertility-promoting agent; in regulation of
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                                                                                                                                                                                                                                                                                                                                                                            PROTEGENE INC
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Copyright (c) 1993 - 2000 Compugen Ltd
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/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
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US-08-286-8129-14
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US-08-198-445-88
US-08-198-198-12
US-08-198-198-12
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US-08-198-198-12
US-08-198-198-12
US-08-198-198-18
US-09-170-996-12
US-08-1847-185-38
US-08-1847-185-38
US-08-183-150-4
US-08-197-198-38
US-08-198-38-35
US-08-445-440-35
US-08-445-461-35
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1.668 Million cell updates/sec
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68.6	68.6	68.6	68.6	68.6	68.6	68.6	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4	71.4
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US-09-469-721-2 ·	US-08-372-183-2	PCT-US95-16311-2	US-08-372-652-2	US-08-915-498B-27	US-09-053-197A-8	US-07-977-630-48	US-08-619-554-4	US-08-619-554-2	PCT-US95-02251-12	US-08-316-650-12	US-09-010-999-1	US-08-963-825-20	US-08-619-198-5	US-08-619-198-3	US-09-082-059-2	US-08-445-461-34	US-08-447-314-34	US-08-170-558-34	US-08-445-640-34	US-08-372-892-2	PCT-US91-07035-12	US-08-458-819-12
Sequence 2, Appli	Sequence 2, Appli	Sequence 2, Appli	Sequence 2, Appli	Sequence 27, Appl	Sequence 8, Appli	Sequence 48, Appl	Sequence 4, Appli	Sequence 2, Appli	Sequence 12, Appl	I.O	Sequence 1, Appli	Sequence 20, Appl	Sequence 5, Appli	Sequence 3, Appli	Sequence 2, Appli	Sequence 34, Appl	Sequence 34, Appl	Sequence 34, Appl	-	Sequence 2, Appli	•	Sequence 12, Appl

ALIGNMENTS

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RESULT 1
US-08-198-446B-15
US-08-198-446B-15
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APPLICANT: Hartwel
APPLICANT: Weinert
APPLICANT: Plon, S
APPLICANT: Groudin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15, Appraise No. 5674996
                                                                                                                TELEFAX: 206-224-0779 INFORMATION FOR SEQ ID NO:
                               TOPOLOGY: 1 MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: Sheiness, Diana K.
REGISTRATION NUMBER: 35,
                                                                                                                                                                                                                                                                                                 SOFTWARE: Patentin Rel CURRENT APPLICATION DATA:
                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                               TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ITLE OF INVENTION:
                                                                                                                   TELEPHONE: 200 ...
TELEPHONE: 206-224-0779
TO TO NO:
                                                                                                                                                                                   NAME: Sheiness, Diana K. REGISTRATION NUMBER: 35,356 REFERENCE/DOCKET NUMBER: FH
                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 18-FEE CLASSIFICATION: 536
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                 DESCRIPTION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: Christensen O'Connor Johnson Kindness PLLC 1420 Fifth Ave., Suite 2800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Plon, Sharon E.
Groudine, Mark T.
WENTION: Cell Cycle
                                                                                  2368 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Weinert, Ted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hartwell,
                                             linear
                                                                                                                                                   206-682-8100
                                                                                                                                                                                                                                                       18-FEB-1994
N: 536
              yeast MEC1 protein
                                                                                                                                                                                                                                                                                                                 Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Leland
                                                                                                                                                                                                                                                                                   US/08/198,446B
                                                                                                                                                                                    FHCR17537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Checkpoint Genes
```

Query Match

85.7%;

Score 30;

DB 1;

Length 2368

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RESULT 3
US-08-286-819A-19
; Sequence 19, Application US/08286819A
                                                                                                                                                                                                                                                                                                                    ; TOPOLOGY: linear
; MOLECULE TYPE: protein
; DESCRIPTION: yeast MEC1 protein
US-08-870-693-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 2
US-08-870-693-15
Sequence 15, Application US/08870693
Patent No. 5866338
GENERAL INFORMATION:
                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: USA
COUNTRY: USA
ZIP: 98101-2347
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS_MS-DOS
OPERATING SYSTEM: PC-DOS_MS-DOS
OPERATION NUMBER: US/08/870.693
FILING DATE: BATENIN STARLERS
CLASSIFICATION NUMBER: US 08/198,446
PRICH APPLICATION NUMBER: US 08/198,446
FILING DATE: FEDYWAYY 18, 1994
APPLICATION NUMBER: PCT_US93/04458
FILING DATE: MAY 12, 1993
APPLICATION NUMBER: US 07/884,426
FILING DATE: MAY 14, 1992
APPLICATION NUMBER: US 07/882,051
FILING DATE: MAY 12, 1993
APPLICATION NUMBER: US 07/882,051
FILING DATE: MAY 12, 1992
APPLICATION NUMBER: US 07/882,051
FILING DATE: MAY 12, 1992
APPLICATION SHAINGER 11,000
                                                                                                                                                                                                            Matches
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Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
TELEPRIONE: 206-682-8100
TELEPRIONE: 206-224-0779
TELEFAX: 206-224-0779
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 TLLEYRM 7
|:|:|||
1647 TILDYRM 1653
                                                                                                                      1647 TILDYRM 1653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Hartwell, Leland H.
APPLICANT: Weinert, Ted A.
APPLICANT: Plon, Sharon E.
APPLICANT: Groudine, Mark T.
TITLE OF INVENTION: Cell Cycle Checkpoint Genes
NUMBER OF SEQUENCES: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 1...
STREET: 1...
STREET: 1...
                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Sheiness, Diana K.
REGISTRATION NUMBER: 35,356
REFERENCE/DOCKET NUMBER: FH
                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                               1 TLLEYRM 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                        amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: Christensen O'Connor Johnson Kindness PLLC 1420 Fifth Ave., Suite 2800
                                                                                                                                                                                                                                                                                                                                                                                                                            2368 amino acids
                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                            85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     71.48;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. 1.9e+02;
2; Mismatches 0;
                                                                                                                                                                                                       Score 30; DB 2; Length 2368; Pred. No. 1.9e+02; 2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FHCR110798
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     US-08-980-357-19

: Sequence 19, Application US/08980357

; Patent No. 6013508
                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                      ; TOPOLOGY: 1i; MOLECULE TYPE: US-08-286-819A-19
                                                                         RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:

NAME: Oblon, No. 5871910man F.

REGISTRATION UNMBER: 24,618
REFERENCE/DOCKET NUMBER: 660-060
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 413-3000
TELEFAX: (703) 413-220
TELEFAX: (703) 413-220
TELEX: 24885 OPAT UR
INFORMATION FOR SEQ ID NO: 19:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                              Matches.
                                                                                                                                                                                                                                                     Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No. 5871910 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION: 435

PILING DATE: 05-AUC. ...
CLASSIFICATION: 435

PRIOR APPLICATION UNMER: US 08/174,682

APPLICATION UNMER: 28-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING UPALL.
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/FR/91/00855
FILING DATE: 29-007-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPUTER: OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION NOMBER: US/08/286,819A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: FR 9013579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 28-DEC-1993
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/917,146
FILING DATE: 10-AUG-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: DKTA MALEN, SYLVIE
APPLICANT: DUKTA MALEN, SYLVIE
APPLICANT: MOLINAS, CATHERINE
APPLICANT: MOLINAS, CATHERINE
APPLICANT: COURVALIN, PATRICE
TITLE OF INVENTION: POLYPEPTIDES IMPLICATED IN THE
TITLE OF INVENTION: EXPRESSION OF RESISTANCE TO GLYCOPEPTIDES, IN PARTICULAR
TITLE OF INVENTION: IN GRAM-POSITIVE BACTERIA, NUCLECTIDE SEQUENCE CODING FOR
TITLE OF INVENTION: THESE POLYPEPTIDES AND USE FOR DIAGNOSIS
NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
                                                                                                                                      120 TLSEYRM 126
                                                                                                                                                                                                                         Match 82.9%; Score 29; DB 2; |
Local Similarity 85.7%; Pred. No. 1.3e+02;
pes. 6; Conservative 0; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 1755 S.
CITY: Arlington
STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, ADDRESSEE: P.C. STREET: 1755 S. Jefferson Davis Highway, Suite 400
                                                                                                                                                                                   1 TLLEYRM 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE: 31-OC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22202
                                                                                                                                                                                                                                                                                                                                                                                    : 988 amino acids
amino acid
GY: linear
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                                                                                                                                                                                                                                                                                                                                                             protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    660-060-0 PCT
                                                                                                                                                                                                                                                                       Length 988;
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Database
                                                                                          Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 50 summaries
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                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                              Searched:
                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                         Sequence:
                                                                                                                                                                                                                                                                                                                                          Perfect score:
                                                                                                                                                                                                                                                                                                                                                         Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       OM protein -
                                                                                                                                                             imum DB
imum DB
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seq length: 2000000000
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                                                                 PIR_68:*
                                                                                                                                                                                                                                         219241 seqs, 76174552 residues
                                                                                                                                                                                                                                                                          Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                             BLOSUM62
                                                                                                                                                                                                                                                                                                                        1 GMNLTWYRESK 11
                                                                                                                                                                                                                                                                                                                                        US-09-281-760C-5
                                                                                                                                                                                                                                                                                                                                                                                                                       April 21,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd
pir1:*
pir2:*
pir3:*
pir4:*
                                                                                                                                                                                                                                                                                                                                                                                                                      2002, 10:18:00 ;
                                                                                                                                                                                                                                                                                                                                                                                    Search time 102.84 Seconds (without alignments) 8.148 Million cell updates/sec
                                                                                                                                                                                                            219241
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result		Query		3		
1	42	66.7	795	- ;	S73830	endopeptidase La
2	41	65.1	351	μ	SAVZVV	antige
ω	41	65.1	351		SAVZWR	antigen p
4	41		353		SAVZVC	antigen
ر ت	41		354		S46877	rotein - v
6	41	•	354		T28616	thetical pr
7	41		355		D72174	
8	41	٠	583		139428	m - human
9	39		367		B31847	othet
10	39		368		JT0348	on s
11	39		1014		S75724	hypothetical prote
12	38		129		I54411	Ωı
13	38		221		HLMSA1	class
14	38		233		I79358	polypro
15	38		233		179357	
16	38		254		S11649	
17	38	60.3	256	<u>بــ</u>	HLMSA2	lass
18	38		256		S02855	ss II hist
19	38		256		I54447	Ë
20	38	٠	258		HLMSAA	class
21	38		310		A86812	ar ABC tra
22	38		454		A46532	chai
23	38		490		A55141	beta-1,
24	38		526		A37821	philin
25	38		530		S00163	tra
26	38		555		JQ1526	interleukin-1 rece
27	38		754		S62512	
28	38		26926		I38344	titin, cardiac mus
29	۳,		227		F6/700	hypothetical prote

50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
36	36	36	36	36	36	36	36	36	36	36	36	36	36	37	37	37	37	37	37	37
57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	57.1	58.7	58.7	58.7	58.7	58.7	58.7	58.7
837	776	776	729	628	577	520	515	447	391	240	182	115	81	1597	1291	895	894	887	691	235
2	2	ν	2	2	N	2	2	2	2	Ν	N	N	2	N	N	N	N	N	Ν	N
T19825	A37035	S13470	A49120	C82039	I50731	H84663	S54592	T34992	н85063	S01299	A25468	B46518	D81873	865053	T09273	A55413	138047	A46764	D84889	C85565
hypothetical prote	isoamylase (EC 3.2	isoamylase (EC 3.2	fibroblast growth	conserved hypothet	Ig heavy chain - r	probable cytochrom	hypothetical prote	probable lipoprote	hypothetical prote	OX-45 membrane gly	T-cell surface gly	Ig L1 chain V regi	hypothetical prote	genome polyprotein	probable tail-host	triglyceride trans	triglyceride trans	microsomal triglyc	probable receptor-	probable tRNA liga

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surface antigen precursor - vaccinia virus
C;Specles: vaccinia virus
A;Note: host Homo sapiens (man)
C;Date: 30-Sep-1991 #sequence_revision 30-Sep-1991 #text_change 16-Jun-2000
C;Accession: A35522
R;Ueda, Y.; Morikawa, S.; Matsuura, Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Gene: Ion; F10_orf795
A;Genetic code: SGC3
C;Superfamily: ATP-dependent serine proteinase La
C;Superfamily: ATP-DAN binding; heat shock; hydrolase; nucleotide binding; P-loop; seri
F;379-386/Region: nucleotide-binding motif A (P-loop)
F;442-447/Region: nucleotide-binding motif B
F;702/Active site: Ser #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R;Himmelreich, R.; Hilbert, H.; Plagens, H.; Pirkl, E.; Li, B.C.; Herrmann, R. Nucleic Acids Res. 24, 4420-4449, 1996
A;Title: Complete sequence analysis of the genome of the bacterium Mycoplasma pneumon A;Reference number: S73327; MUID:97105885
A;Accession: S73830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          endopeptidase La (EC 3.4.21.53) - Mycoplasma pneumoniae (strain ATCC 29342)
N;Alternate names: ATP-dependent proteinase lon; ATP-dependent serine proteinase La;
N;Contains: adenosinetriphosphatase (EC 3.6.1.3)
C;Species: Mycoplasma pneumoniae
A;Variety: ATCC 29342
C;Date: 09-Apr-1999 #sequence_revision 09-Apr-1999 #text_change 19-Jan-2001
C;Accession: S73830
                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: EMBL:AE000050; GB:U00089; NID:g1674197; PIDN:AAB96152.1; PID:g167
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, November 1996
C;Comment: This enzyme catalyzes the hydrolysis of large proteins in the presence of
                                                                                                                                                                                        SAVZVV
                                                                                                                                                                                                                           RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C; Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: DNA
A; Residues: 1-795 <HIM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Status: nucleic acid sequence not shown; translation not shown
                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                322 MNLPWWQESK 331
                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity nes 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                          2 MNLTWYRESK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         66.7%;
70.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                            2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 42;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 795;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
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A;Molecule type: DNA
A;Residues: 1-351 <SMI>
A;Residues: 1-351 <SMI>
A;Cross-references: GB:D01019; NID:g222698; PIDN:BAA00826.1; PID:g222699
A;Cross-references: GB:D01019; NID:g222698; PIDN:BAA00826.1; PID:g222699
A;Cross-reference (B) (Novard, S.T.
J. Gen. Virol. 72, 1349-1376, 1991
J. Gen. Virol. 72, 1349-1376, 1991
A;Title: Nucleotide sequence of 42kbp of vaccinia virus strain WR from near the right in A;Reference number: J01767; MUID:91259063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A:Molecule type: mRNA
A;Residues: 1-351 (UED)
A;Cross-references: EMBL:D90076; NID:g222769; PIDN:BAA14116.1; PID:g222770
C;Csuperfamily: vaccinia virus surface antigen; immunoglobulin homology
C;Superfamily: vaccinia virus surface antigen
C;KeyWords: glycoprotein; surface antigen
F;1-19/Domain: signal sequence #status predicted <SIG>F;1-19/Domain: signal sequence #status predicted <SAT>F;265-335/Domain: immunoglobulin homology <CHM>F;2117,182,261,269/Binding site: carbohydrate (Asn) (covalent) #status predicted
surface antigen precursor - vaccinia virus (strain Copenhagen)
C;Species: vaccinia virus
A;Note: host Homo sapiens (man)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      F;165-223/Domain: immunoglobulin homology <IMM2>
F;265-335/Domain: immunoglobulin homology <IMM2>
F;265-335/Domain: immunoglobulin homology <IMM3-
F;717-129,172-231,72-333/Disulfide bonds: #status predicted
F;117,182,261,269/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A)Cross-references: DDBJ:D11079; NID:g222717; PIDN:BAA01848.1; PID:g222763; DDBJ:D01019; C:Superfamily: vaccinia virus surface antigen; lumunoglobulin homology C;Keywords: glycoprotein; surface antigen C;Keywords: glycoprotein; surface antigen F;1-19/Domain: signal sequence #status predicted <SIG> F;1-19/Domain: surface antigen #status predicted <SFA> F;0-131/Domain: immunoglobulin homology <MMLP: Commaio: immunoglobulin homology <MMLP: Comma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R;Smith, G.L.; Chan, Y.S.
J. Gen. Virol. 72, 511-518, 1991
A;Title: Two vaccinia virus proteins structurally related to the interleukin-1 receptor
A;Reference number: A38472; MUID:91170931
A;Accession: B38472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Species: vaccinia virus
A;Note: host Homo saptens (man)
C;Date: 30-Jun-1993 #text_change 16-Jun-2000
C;Date: 30-Jun-1993 #sequence_revision 30-Jun-1993 #text_change 16-Jun-2000
C;Accession: B38472; JQ1812; JQ0930
R;Smith, G.L.; Chan, Y.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
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A;Title: Identification and nucleotide sequence of the gene encoding a surface antigen A;Reference number: A35522; MUID:90320131
A;Accession: A35522
                                                                                                                                                                                                                              RESULT
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Best Local Similarity
Thes 5; Conserve
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Residues: 1-351 <SM2>
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#200 protein - variola virus

N;Alternate names: B19R protein (COP)
C;Species: variola virus
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 23-Mar-2001
C;Accession: 946877, B36857
R;Kolykhalov, A.A.; B11nov, V.M.; Gytorov, V.V.; Pozdnyakov, S.G.; Chizhikov, V.E.; F
submitted to the EMBL Data Library, April 1992
A;Description: Nucleotide sequence analysis of the region of Variola virus xhol F O H
A;Reference number: 946868
A;Accession: 946877
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-354 <KOL>
A;Cross-reference number: A56868
A;Status: preliminary
A;Status: preliminary
A;Status: preliminary
A;Cross-reference s: EMBL:X67117; NID:9516428; PIDN:CAA47529.1; PID:9516438
A;Experimental source: strain India-1967, isolate Ind3
R;Blinov, V.M.
Sumber: A36859
A;Accession: B36857
A;Status: preliminary
A;Status: preliminary
A;Status: preliminary
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R:Goebel, S.J.; Johnson, G.P.; Perkus, M.E.; Davis, S.W.; Winslow, J.P.; Paoletti, E. Virology 179, 247-266, 1990
A.Title: The complete DNA sequence of vaccinia virus.
A.Reference number: A4253; MUID:91021027
A.Contents: annotation; possible protein coding frames
A.Note: neither amino acid nor nucleotide sequence is given
C.Superfamily: vaccinia virus surface antigen; immunoglobulin homology
C.Keywords: glycoprotein; surface antigen
F.1-21/Domain: signal sequence #status predicted <SIG>F.22-353/Product: surface antigen #status predicted <SIG>F.25-353/Product: surface antigen #status predicted <SIG>F.267-337/Domain: immunoglobulin homology <IMM>
F.119,184,263,271/Blnding site: carbohydrate (Asn) (covalent) #status predicted
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: GB:X69198; NID:g456758; PIDN:CAA49129.1; PID:g457079 A;Experimental source: strain india-1967, ssp. major; isolate india-1967; ssp. major;
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A; Accession: I42527
A; Molecule type: DNA
A; Residues: 1-353 <GOE>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: DNA
A; Residues: 1-354 <BLI>
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185 NITWYKDNK 193
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                                                                                               3 NLTWYRESK 11
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                                                                                                                                                                                                          Conservative
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                                                                                                                                                                                                                                                         Score 41; DB 2; Length 354; Pred. No. 12;
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RESULT

Npr 21 10:51:27 2002

GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.

OM protein - protein search, using sw model

Run on; April 21, 2002, 10:37:27; Search time 85.5 Seconds (without alignments)
4.717 Million cell updates/sec

US-09-281-760C-5 63 1 GMNLTWYRESK 11

Title:
Perfect score:
Sequence:

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

100059 seqs, 36664827 residues

Total number of hits satisfying chosen parameters: 100059

imum DB seq length: 0
imum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 50 summaries

Database :

SwissProt_39:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

7 9 9 11 11 11 11 11 11 11 11 11 11 11 11	Result
33881 33881 338888888888888888888888888	Score 42 41 41 41 41 41
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583 221 222 233 233 233 233 234 256 256 256 256 256 256 256 256 256 256	1 '
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C166_MOUSE HA2Q_MOUSE HA2Q_MOUSE HA2F_MOUSE HA2F_MOUSE HA2F_MOUSE HA2B_MOUSE HABAD_MOUSE MTP_MOUSE MTP_MOUSE MTP_MOUSE MTP_MESAU MTP_MESAU MTP_MESAU CD3G_HUMAN MTP_MESAU CD48_RAT YMO_YEAST FGR1_DROME ISOA_PSESP ISOA_PSESP	ID LON_MYCPN VB19_VACCD VB19_VACCV VB19_VACCC C166_HUMAN C166_HUMAN
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LON_MYCGE	NUCL_MESAU	NUCL_RAT	NUCL_HUMAN	APPA_BACSU	YP60_METTM	XYLB_LACLA	HVCM_HETFR	HVCS_HETFR	HVC2_HETFR	O67B_DROME	YNQ5_YEAST	HVC3_HETFR	HVC1_HETFR	RL5_CHLTR	RL5_CHLMU	YLE5_CAEEL
P47481	P08199	P13383	P19338	P42061	P14933	Q9cfg8	P23088	P23087	P23085	Q9vt20	P53891	P23086	P23084	P28531	Q9pjm6	P46941
mycoplasma	mesocricetu	rattus norv	homo sapien	bacillus su	methanobact	lactococcus	heterodontu	heterodontu	heterodontu	drosophila	saccharomyc	heterodontu	heterodontu	chlamydia	chlamydia	caenorhabdi

DR	88888888	# # 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	R R R R R R R O O O	RESULT LON_MY ID L AC DT O DT O DT O C O C O C O C O C O C O C O C O C O
E000050; AAB96152.1; - S18.004; - S18.004; - c) IPR003593; AAA_subf c) IPR001939; ATP_GTP_ c) IPR00111; LON_ c) IPR003111; LON_ c) IPR001984; Lon_endo F00004; AAA; 1 F02190; LON; 1 F02190; ENDOLAPTASE.	This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).	PROUNDING. 7; NUCLEIC ACIDS RES. 24:4420-4449(1996). -I FUNCTION: DEGRADES SHORT-LIVED REGULATORY AND ABNORMAL PROTEINS IN PRESENCE OF ATP. DEGRADES THE REGULATORY PROTEINS RCSA AND SULA. HYDROLYZES TWO ATPS FOR EACH PEPTIDE BOND CLEAVED IN THE PROTEIN SUBSTRATE (BY SIMILARITY). -I CAPALYTIC ACTIVITY: HYDROLYSIS OF LARGE PROTEINS SUCH AS GLOBIN, CASEIN AND DENATURATED SERUM ALBUMIN, IN PRESENCE OF ATP. -I SUBUNIT: HOMOTETRAMER (BY SIMILARITY). -I SUBCELLULAR LOCATION: CYTOPLASMIC. -I SUBCELLULAR LOCATION: CYTOPLASMIC. -I SUMILARITY: BELONGS TO PETTIDASE FAMILY S16; ALSO KNOWN AS THE LON FAMILY OF ATP-DEPENDENT PROTEASES.	Bacteria; Firmicutes; Bacillus/Clostridium group; Mollicutes; Mycoplasmataceae; Mycoplasma. Mycoplasma. NCBL_TaxID=2104; [1]	RESULT 1 LOW_MYCPN STANDARD; PRT; 795 AA. LOW_OF AC P78025; DT 01-NOV-1997 (Rel. 35, Created) DT 01-NOV-1997 (Rel. 35, Last sequence update) DT 20-AUG-2001 (Rel. 40, Last annotation update) DE ATP-DEPENDENT PROTEASE LA (EC 3.4.21.53). DE ATP-DEPENDENT PROTEASE LA (EC 3.4.21.53). DI ON OR MPN332 OR MP504.

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VB19_
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                                                                                                                                                                   This SWISS-PROT entry is copyright. It is produced through a collaboration between the SW1ss Institute of Bioinformatics and the EWBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to licenseeisb-sib.ch).
                                                                                                                                                                                                                                                                                                                 NP_BIND
ACT_SITE
SEQUENCE
                                                                                                                                                                                                                                                -!- SIMILARITY: CONTAINS 2 IMMUNOGLOBULIN-LIKE C2-TYPE DOMAINS.
-!- SIMILARITY: CONTAINS 1 IMMUNOGLOBULIN-LIKE V-TYPE DOMAIN.
-!- SIMILARITY: TO THE INTERLEUKIN-1 RECEPTOR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAR-1992 (Rel. 21, Created)
01-MAR-1992 (Rel. 21, Last sequence update)
20-ANG-2001 (Rel. 40, Last annotation update)
SURFACE ANTIGEN S PRECURSOR (S ANTIGEN).
                                                                                                     Pfam; PF00047; ig; SMART; SM00410; IG
                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A. MEDLINE-90320131; PubMed-2196742;
                                                                                                                                                                                                                                                                                                                                                                                                                            Vaccinia virus (strain Dairen I).
Viruses; dsDNA viruses, no RNA stage; Poxviridae; Chordopoxvirinae;
                                              DOMAIN
                                                        DOMAIN
                                                                                                                                                     EMBL; D90076; BAA14116.1; -
                                                                                                                         InterPro; IPR003006; InterPro; IPR003600;
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P23998;
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SMART; SM00464; LON; 1.
PROSITE; PS01046; LON_SER;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          322 MNLPWWQESK 331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
nes 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 MNLTWYRESK 11
                                                                                                                                                                                                                                                                                REPLICATION ENHANCED.
SUBCELLULAR LOCATION: INDUCED ON THE SURFACE OF VACCINIA VIRUS-INFECTED CELLS.
                                                                                                                                                                                                                                                                                                            INFLAMMATORY RESPONSE WOULD BE DIMINISHED AND VIRUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;; Serine protease; ATP 304 308 PO 379 386 ATF 702 702 BY 795 AA; 90203 MW;
      20
65
164
264
73
172
272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
                                                                                                       IG_like; 1.
     19
351
137
229
341
129
129
221
333
                                                                                                                      Ig_MHC.
Ig_like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         66.7%;
                                                                                             Antigen;
   igen; Glycoprotein; Signal; Early protein.
POTENTIAL.
SURFACE ANTIGEN S.
IG-LIKE C2-TYPE DOMAIN 1.
IG-LIKE C2-TYPE DOMAIN 2.
IG-LIKE C2-TYPE DOMAIN 2.
IG-LIKE V-TYPE DOMAIN.
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2
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POLY-SER.
ATP (POTENTIAL).
BY SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 42; DB 1; Length 795; Pred. No. 6.7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7E7855082060C891 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          351 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   proteome
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FFT
FFT
FFT
FFT
PIR JOI812; JQ1812.
Interpro; IRR003306; Ig_MRC.
Interpro; IRR003500; Ig_11ke.
Pfam; PF00047; 1g; 2.
SMART; SM00410; IG_11ke; 1.
Immunoglobulin domain; Antigen
SIGNAL
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Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
EMBL; D11079; BAA00148.1; --
EMBL; D01019; BAA00825.1; --
EMBL; X56122; CAA39567.1; --
EMBL; A19579; CAA0178.1; --
PIR; B3847.2; SAVWAR.
PIR; J01812; JQ1812.
                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CARBOHYD
CARBOHYD
CARBOHYD
CARBOHYD
SEQUENCE
                                                                                                                                                                                                                                                                                                                               MEDLINE-91170931; PubMed-1826022;
Smith G.L., Chan Y.S.;
Smith G.L., Chan Y.S.;
"Two vaccinia virus proteins structurally related to the interleukin-1 receptor and the immunoglobulin superfamily.";
J. Gen. Virol. 72:511-518(1991).
J. FUNCTION: MAY BIND INTERLEUKIN-1 AND/OR INTERLEUKIN-6 AND PREVENT THESE CYTOKINES REACHING THEIR NATURAL RECEPTORS. IN CONSEQUENCE THE INFLAMATORY RESPONSE WOULD BE DIMINISHED AND VIRUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          _VACCV
VB19_VACCV
VB19_VACCV
STANDARD; PRT; 351 AA
P25213;
01-MAY-1992 (Rel. 22, Created)
01-MAY-1992 (Rel. 22, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
SURFACE ANTIGEN S PRECURSOR (S ANTIGEN).
B19R OR B18R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.

MEDLINE=91259063; PubMed=2045793;

MEDLINE=91259063; PubMed=2045793;

Smith G.L., Chan Y.S., Howard S.T.;

"Nucleotide sequence of 42 kbp of vaccinia virus strain WR from near
the right inverted terminal repeat.";

"J. Gen. Virol. 72:1349-1376(1991)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Vaccinia virus (strain WR)
Viruses; dsDNA viruses, no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Orthopoxvirus.
NCBI_TaxID=10254;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                182 NITWYKDNK 190
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5; Conserv
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261
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321
351
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40701 .
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55.6%;
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Pred. No. 4.4;
4; Mismatches
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N-LINKED (GLCNAC. . .) (POTENTIAL)
N-LINKED (GLCNAC. . .) (POTENTIAL)
N-LINKED (GLCNAC. . .) (POTENTIAL)
, 20997CB67D39E7DB CRC64;
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Antigen; Glycoprotein; Signal; Early protein-POTENTIAL.

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Title:
Perfect score:
Sequence:
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Maximum Match 100%
Listing first 50 summaries
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Gapop 10.0 , Gapext 0.5
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63
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sp_bacteria:*
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sp_human:*
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sp_mhc:*
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sp_vertebrate:*
sp_unclassified:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Query Query Query Query Query A 56.7 380 2 295405 41 65.1 113 6 09BDE7 41 65.1 315 12 09DUN2 41 65.1 351 12 072754 41 65.1 353 12 09JFU7 41 65.1 353 12 09JF34 41 65.1 353 12 09JF34 41 65.1 352 12 09JF34 41 65.1 353 12 09JF34 41 65.1 354 12 08J15 41 65.1 352 16 046634 41 65.1 521 6 046634 41 65.1 521 6 046631 42 076423 076423 076423 076423 trypanosoma 43 61.9 244 5 076423 49 61.9 368 5 026748 40 09f446 streptococc
DB ID D 2 Q95405 6 Q9BDE7 12 Q9FUV 12 Q9FU7 12 Q97754 12 Q97754 12 Q89115 12 Q89923 6 Q46651 6 Q46651 6 Q46651 6 Q9BH13 11 Q35112 5 Q9NA52 5 Q9NA52 5 Q76423 5 Q76423 5 Q76423 11 Q9JR39 2 Q9F446 5 Q267748
DB ID D 2 Q95405 2 Q95405 6 Q9BDE7 12 Q9FUN 12 Q9FU7 12 Q9FU7 12 Q9F15 12 Q89115 12 Q89123 6 Q46651 6 Q46651 6 Q46651 6 Q9H13 11 Q35112 5 Q9NA52 6
ID D Q9S405 Q9S405 Q9BDE7 Q9DUN2 Q9DUN2 Q9JFU7 Q9JF34 Q9JF34 Q99923 Q46634 Q46634 Q46651 Q9H13
ID D Q95405 Q9BDE7 Q9DUN2 Q9IF97 Q91754 Q91754 Q91754 Q91734 Q9173 Q89115 Q89923 Q46631 Q89112 Q9H313 Q35112 Q9H313 Q3512 Q9H313 Q3512 Q9H3446 Q9H348
Description Oys405 proteus Oybde7 sus scr. Oydun2 vaccin Oyifu7 bean 5: O72754 cowpox Oyif44 vaccin O89115 variol: O8923 variol: O46634 canis fi O46651 oryctol: Oybh13 bos tau O35112 rattus Oyh623 trypano: O76422 trypano: O76422 trypano: O9jk39 mus mu: O9f446 strepto: O26773 trypano: O26748 trypano: O26748 trypano:

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36	36	36	36	36	36	36	36	36	37	37	37	37	37	37	38	38	38	38	38	38	38	38	38	38	38	38	38	38	39	39	
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PRELIMINARY;

PRT;

113 AA

Вþ

184 NITWYKDNK 192

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Query Match
Best Local
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Best Local
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OPDINZ;
OPDINZ;
O1-MAR-2001 (TrEMBLrel. 16, Created)
O1-MAR-2001 (TrEMBLrel. 16, Last sequence update)
O1-UN-2001 (TrEMBLrel. 17, Last annotation update)
INTERFERON-ALPHA/BETA RECEPTOR.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ol-JUN-2001 (TEMBLrel. 17, Created)
Ol-JUN-2001 (TEMBLrel. 17, Last sequence update)
Ol-JUN-2001 (TEMBLrel. 17, Last anotation update)
ACTIVATED LEUKOCYTE CELL ADHESION MOLECULE (FRAGMENT).
                                                                                                                                                                                                                                                                                          EMBL; AJ269556; CAC16604.1; -
InterPro; IPR003600; Ig_like.
InterPro; IPR003006; Ig_MHC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa; Chordata, Craniata; Vertebrata, Euteleostomi,
Mammalla: Butheria; Cetartiodactyla; Suina; Suidae; Sus.
NCBI_TaxID=9823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sus scrofa (Pig)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alcami A., Symons J.A., Smith G.L.;
"The vaccinia virus soluble alpha/beta interferon (IFN) receptor binds
the cell surface and protects cells from the antiviral effects of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN-WYETH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vaccinia virus.
Viruses; dsDNA viruses,
                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Orthopoxvirus
                                                                                                                                                                                                                                                  SMART; SM00410;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       IFN.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NCBI_TaxID=10245;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                           Virol. 74:11230-11239(2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ISSUE-BONE MARROW;
                         3 NLTWYRESK 11
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5; Conser
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6; Conserv
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                                                                                                                                                                                                     265 AA;
                                                                          Conservative
                                                                                                                                                                                                                                               ig; 1.
; IG_like; 1.
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12786 MW;
                                                                                                                                                                                                     31038 MW;
                                                                                              65.18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    no RNA stage; Poxviridae; Chordopoxvirinae;
                                                                          4.
                                                                                                 Score 41; DB 12; Length 265; Pred. No. 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 41; DB 6; Pred. No. 4.9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E4701124906F443F CRC64;
                                                                                                                                                                                                     BA43AEEB1DAA1A49 CRC64;
                                                                          Mismatches
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                                                                          0;
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072754
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    072754
072754;
EMBL; Y15035; CAA75293.1; -. InterPro; IPR003599; Ig. InterPro; IPR003509; Ig_like. InterPro; IPR003006; Ig_MHC.
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01-AUG-1998 (TrEMBLrel. 07, Last seg
01-JUN-2001 (TrEMBLrel. 17, Last ann
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01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-OUN-2001 (TrEMBLrel. 17, Last annotation update)
SOLUBLE IFN RECEPTOR (FRAGMENT).
                                                                                                                     Virology 243:432-460(1998).
-i- SIMILARITY: TO IMMUNOGLOBULIN AND MAJOR HISTOCOMPATIBILITY COMPLEX
                                                                                                                                                                           proteins."
                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. STRAIN=GRI-90;
                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=10243;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Viruses; dsDNA viruses, no RNA stage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cowpox virus (CPV).
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SMART; SM00410; IG_like; 1.
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InterPro; IPR003006; Ig_MHC.
Pfam; PF00047; ig; 2.
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315 AA;
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Last annotation update)
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Database
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Maximum Match 100%
Listing first 50 summaries
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    April 21, 2002, 10:38:47; Search time 23.48 Seconds (without alignments) 4.792 Million cell updates/sec
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Copyright (c) 1993 - 2000
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/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
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/cgn2_6/ptodata/1/iaa/BCTUS_COMB.pep:*
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US-08-968-676-25
US-09-214-614-2
US-08-240-712-4
US-08-240-418-59
US-08-428-488-61
US-08-428-488-61
US-08-428-488-62
US-08-428-488-63
US-08-428-488-66
US-08-428-488-67
US-08-428-488-69
US-08-428-488-70
US-08-428-488-72
US-08-428-488-72
US-08-428-488-73
US-08-428-488-73
US-08-428-488-72
US-08-428-488-73
US-08-488-73-73-22
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66.7	66.7	66.7	66.7			66.7			66.7		•	66.7	66.7	66.7	66.7	66.7		•	66.7		66.7	66.7
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PCT-US96-08798-2	PCT-US93-01669-16	PCT-US92-09752-4	US-09-058-562-4	US-09-082-593-11	US-09-047-986B-20	US-08-989-045-28	US-08-989-045-27	US-08-591-196-12	US-08-747-137-78	US-08-752-844-12	US-08-968-676-26	US-08-685-589A-62	US-08-685-589A-6	US-08-623-833B-61	US-08-705-660-28	US-08-705-660-27	US-08-473-022-2	US-08-441-871-70	US-08-441-871-68	US-08-441-871-66	US-08-441-871-65	US-08-441-871-63
Sequence 2, Appli	Sequence 16, Appl	Sequence 4, Appli	Sequence 4, Appli	Sequence 11, Appl	Sequence 20, Appl	Sequence 28, Appl	Sequence 27, Appl	Sequence 12, Appl	Sequence 78, Appl	Sequence 12, Appl	Sequence 26, Appl	Sequence 62, Appl	Sequence 6, Appli	Sequence 61, Appl	Sequence 28, Appl	Sequence 27, Appl	Sequence 2, Appli	Sequence 70, Appl	Sequence 68, Appl	Sequence 66, Appl	`	Sequence 63, Appl

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JD NO:
ACTERISTICS:
AMENO ACIDS
AMENO ACIDS
STRANDEDNESS: Single
FOPOLOGY: linear
MOLECULE TYPE: pep+
US-08-968-676-25
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US-08-968-676-25
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Query Match
Best Local Similarity
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                                                                                                                                                                                TELEFAX: (207) 363-0528 INFORMATION FOR SEQ ID NO: :
                                                                                                                                                                                                          REGISTRATION NUMBER: 35,505
REFERENCE/DOCKET NUMBER: REF
TELECOMMUNICATION INFORMATION:
TELEPHONE: (207) 363-0558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Farrell, Kevin M
REGISTRATION NUMBER: 35,
                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 03911
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Xu, Minzhen TITLE OF INVENTION: IM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: P.O. Box (CITY: York Harbor
                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Kevin M. 1
STREET: P.O. Box 999
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Adams, Sharlene
77.8%;
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Score 14;
Pred. No.
; DB 2;
. 1.6e+05;
                 Length 5;
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RESULT 2
US-09-214-614-2
US-09-214-614-2
; Sequence 2, Application US/09214614
; Patent No. 6225100
; GENERAL INFORMATION:
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Sequence 27, Application US/08968676

Patent No. 5919639

GENERAL INFORMATION:
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ZIF: 80703

COMPUTER READABLE FORM:
MEDIUM TYPE: PLOPDY disk
MEDIUM TYPE: PLOPDY disk
COMPUTER: 1BM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
URRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/214,614
FILING DATE: US/09/214,614
FILING DATE: US/09/214,614
FILING DATE: J.
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Connell, Gary J.
REGISTRATION NUMBER: 32,020
REFERENCE/DOCKET NUMBER: 3161-15-PCT
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 303/863-9700
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Best Local Similarity
Matches 2; Conserv
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INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 2 amino acids
                                                       APPLICANT: XU, MINZHEN
TITLE OF INVENTION: IMMUNOTHERAPY BY MODULATION OF ANTIGEN
NUMBER OF SEQUENCES: 165
CORRESPONDENCE ADDRESS:
ADDRESSE: Kevin M. Faxxell, P.C.
STREET: P.O. Box 999
CITEL OF STREET: P.O. Box 999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Grund, Alan D.
APPLICANT: MAUXINA-BRUNKER, Julie
TITLE OF INVENTION: NOVEL ARYLSULFOTRANSFERASE
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
                                                                                                                                                                      APPLICANT: Humphreys, Robert E
APPLICANT: Adams, Sharlene
APPLICANT: Xu, Minzhen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET: 1700 Lincoln Street, Suite 3500 CITY: Denver
COUNTRY:
                                     CITY: York Harbor
                                                                                                                                                                                                                                                                                                                                                                                            1 YR 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             66.7%; Score 12; DB 4; Lot ilarity 100.0%; Pred. No. 1.6e+05; Conservative 0; Mismatches 0;
USA

 Mismatches

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FILING DAYE:
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FILING DAYE:
ATTORNEY/AGENT INFORMATION:
NAME: FATTELL REVIN M
REGISTRATION NUMBER: 35,505
REFERENCE_DOCKET NUMBER: REH-9
TELECOMMUNICATION INFORMATION:
TELEPHONE: (207) 363-0528
FILEPEAX: (207) 363-0528
INFORMATION FOR SED ID NO: 27:
SEQUENCE CHARACTERISTICS:
LENGTH: 3 amino acids
TOTAL ACTUAL STATEMENT OF THE SED ID NO: 27:
SEQUENCE CHARACTERISTICS:
LENGTH: 3 amino acids
TOTAL ACTUAL STATEMENT OF THE SED ID NO: 27:
SEQUENCE CHARACTERISTICS:
LENGTH: 3 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; MOLECULE TYPE: peptide US-08-968-676-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-240-712-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 4, Application US/08240712 Patent No. 5599907 GENERAL INFORMATION:
                                                         MEDIUM TYPE: FLORPY disk

COMPUTER: IBM PC COMPATIBLE

OPERATING SYSTEM: PC - DOS/MS-DOS

OPERATING SYSTEM: PC - DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION UMBER: US/08/240,712

FILING DATE: 09-MAY-1994

CLASSIFICATION DATA:

APPLICATION DATA:

APPLICATION UMBER: PCT/US92/09752

FILING DATE: 13-MAY-1993

ATTORNEY/AGENT INFORMATION:

NAME: COOPER, IVER

REGISTRATION UMBER: ANDERSON-6

REFERENCE/DOCKET NUMBER: ANDERSON-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 2; Conserv
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/968,676
PITTING NAME.
                                                                                                                                                                                                                                                                                                                                                                   ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: ANDERSON, DAVID C.
APPLICANT: MATHEWS, ANTONY JAMES
APPLICANT: STETLER, GARY L.
TITLE OF INVENTION: PRODUCTION AND USE OF MULTIMERIC
TITLE OF INVENTION: HEMOGLOBINS
NUMBER OF SEQUENCES: 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                         TELEPHONE: 202-628-5197
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CITY: Washington
STATE: D.C.
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STRANDEDNESS: si
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  202-737-3528
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linear
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Result
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Perfect score:
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imum DB seq length: 5
        110
110
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                                                                                                                                                                                                                                                         Match
                                                                                                                                                                                                                                                                               Query
      // SIDS1/gcgdata/geneseq/geneseqp/AA1980.DAT:*

// SIDS1/gcgdata/geneseq/geneseqp/AA1982.DAT:*

// SIDS1/gcgdata/geneseq/geneseqp/AA1983.DAT:*

// SIDS1/gcgdata/geneseq/geneseqp/AA1983.DAT:*

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Gapop 10.0 , Gapext 0.5
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Listing first 50 summaries
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                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                             /SIDS1/gcgdata/geneseq/geneseqp/AA2001.DAT:*
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                                           AAR55508
AAR55490
AAW47949
AAY69582
AAB81468
AAB91738
                                                                                                                                                                    AAR08321
AAR55499
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9.156 Million cell updates/sec
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Leu - enkephalin.
Peptide with opioi
Opioid oligopeptid
Opioid oligopeptid
Opioid oligopeptid
AEIOI analogue eff
Generic immunogeni
Synthetic peptide,
Opioid peptide SEQ
Analgesic peptide.
Anti-inflammatory
                                                                                                                                                                                                                                                     Description
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50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
66.7	•	•	66.7	66.7	•	•	66.7	٠	•	•	66.7	•	•	٠	٠		•	66.7	•	•	66.7	•			66.7			•	•	•	•	•	•	•	•	66.7	66.7	66.7
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547	547	547	AAR55471	AAR55469	546	546	AAR55494	549	54	AAR55488	AAR55485	54	54	Çī.	5	t n	AAR55502	5	54	15	15	AAW51593	AAR38136	AAR33664	AAR33660			230	AAP71700	7158	AAP71580	134	-	AAP61491	AAP50690	AAP50336	046	AAB91597
oligopept	oid oligopept	Opioid oligopeptid	oid	Opioid oligopeptid	id	analogue	analc	se-non-la	hormone	hormone re	nternalisation	Pase B-like	nated p	sic peptide	hormone	hor	Ç	Ç	ic peptide	Ę.	ic e	lin analc	Opioid peptide SEQ															

ALIGNMENTS

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RESULT
AAP10205
ID AAP1
XX AAP1
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WPI; 1981-43030D/24 (43030D)
                    (DAUC ) DAIICHI SEIYAKU KK.
                                         21-SEP-1979;
                                                              21-SEP-1979;
                                                                                   25-APR-1981.
                                                                                                      JP56045450-A.
                                                                                                                                       Misc-difference
                                                                                                                                                                      Synthetic.
                                                                                                                                                                                          Analgesic; enkephalin.
                                                                                                                                                                                                              Leu- enkephalin.
                                                                                                                                                                                                                                  16-DEC-1992 (first entry)
                                                                                                                                                                                                                                                          AAP10205;
                                                                                                                                                                                                                                                                              AAP10205 standard; Protein; 5 AA.
                                         79JP-0121654.
                                                              79JP-0121654.
                                                                                                                                       Location/Qualifiers
                                                                                                                            /note= "D- or L-form residue"
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AAW33241

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RESULT
AAR08321
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Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
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It is prepd. by conventional chemical synthesis, either in liq. phase or solid phase.
                                                                                                               New peptide and its pharmaceutically acceptable salts \cdot has opioid action, useful for analgesics
                                                                                                                                                                                                                                                                                                                           Misc-difference 5
                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Analgesic penta:peptide - comprising tyrosine, arginine, glycine, phenylalanine with methionine or leucine hydroxyl or amine
                                               Sequence
                                                                                           Claim 1; Page 861; 5pp; Japanese.
                                                                                                                                                 WPI; 1990-325185/43.
                                                                                                                                                                                            07-MAR-1989;
                                                                                                                                                                                                                 07-MAR-1989;
                                                                                                                                                                                                                                                           JP02233694-A.
                                                                                                                                                                                                                                                                                                                                                 Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                             Analgesic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Peptide with opioid activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-FEB-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR08321;
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                                                                     Peptide has opioid activity, useful in analgesics
                                                                                                                                                                     (VITA-) VITAMINE KENKYUSHO.
                                                                                                                                                                                                                                       17-SEP-1990.
                                                                                                                                                                                                                                                                                                                                                                      Modified-site
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                                                5 AA;
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                                                                                                                                                                                            89JP-0052901.
                                                                                                                                                                                                                 89JP-0052901.
                                                                                                                                                                                                                                                                              /label= -NH-CH-CH2-CH(CH3)2-X or -Leu-NH-CH2-X
    or -NH-CH2-X
    /note= "X = -N-(2-(3-nitro-2-pyridyldithio)ethyl)
    amide"
                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                          /label- D-Arg
                                                                                                                                                                                                                                                                                                                                      /label= Phe or Phe(NO2) or MePhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           77.88;
   77.8%;
60.0%;
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Pred. No. 4.3e+05;
"'~mm*rches 2; Indels
   Score 14;
Pred. No.
   DB 11;
4.3e+05;
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     RESULT
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FF FXX XXX XXX XXX

PD XXX PR XXX PR

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Matches
                                                                                                                                                                                                                            specific opioid receptors.
                                                                                                                                                                                                                                            This peptide is an example of a highly generic formula representing opioid oligopeptides which selectively bind to receptors on cells. The peptides have analgesic, antitussive and antidiarrhoeal activity. They can also be used for treating various cancers such as lung or present cancer, melanoma or neuroblastoma, and as tools for detecting breast cancer, melanoma or neuroblastoma, and as tools for detecting
                                                                                                                                                                                                                                                                                                                                                                                                            New opioid oligo:peptide cpds. - having analgesic, antitussive, antidiarrhoeal and antitumour activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1994-183155/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kim SH, Moreau J, Taylor JE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (BIOM-) BIOMEASURE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-NOV-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-NOV-1993;
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pain killer.
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                                                                                                                                                                                                                                                                                                                                                                  Claim 16; Page 39; 45pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAY-1994.
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                                                                                      Conservative
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/note= "3,4-dihydroxyphenylalanine (DOPA)"
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80.0%; Pred. No. 4.3e+05;
tive 0; Mismatches 1;
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re greater than or equal to the score of the result being printed,
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Listing first 50 summaries
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Copyright (c) 1993 - 2000 Compugen Ltd
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P82070;
01-MAY-2000 (TrEMBLrel. 13, C
01-MAY-2000 (TREMBLrel. 13, L
01-MAY-2000 (TREMBLrel. 13, L
RUBELLIDIN 1.1.
                                                                                                                               "The structure of new peptides from the Australin red tree 'Litoria rubella'. the skin peptide profile as a probe for of evolutionary trends of amphibians.";
Aust. J. Chem. 49:955-963(1996).
-!- FUNCTION: CABRIDINS SHOW NEITHER NEUROPEPTIDE ACTIVITY ANTIBIOTIC ACTIVITY.
-!- TISSUE SPECIFICITY: SECRETED BY THE SKIN DORSAL GLANDS.
-!- MASS SPECTROMETRY: MW-598; METHOD-FAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE-91282758; PubMed=1840486;
Sato H., Aono S., Kashiwamata S., Koiwai O.;
"Genetic defect of bilirubin UDP-glucuronosyltransferase in the hyperbilirubinemic Gunn rat.";
Biochem. Biophys. Res. Commun. 177:1161-1164(1991).
-I- FUNCTION: UDPGT IS OF MAJOR IMPORTANCE IN THE CONJUGATION AND SUBSEQUENT ELIMINATION OF POTENTIALLY TOXIC XENOBIOTICS AND ENDOGENOUS COMPOUNDS.
-I- CATALYTIC ACTIVITY: UDP-GLUCURONATE + ACCEPTOR = UDP + ACCEPTO
                                                                                                                                                                                                                                                                                   TISSUE-SKIN SECRETION;
Steinborner S.T., Wabnitz P.A., Waugh R.J., Bowie J.H.,
Tyler M.J., Wallace J.C.;
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SEQUENCE
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                               Amphibian skin.
SEQUENCE 5 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Litoria rubella (Desert tree frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                               Amphibia; Batrachia;
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Score 3; DB 13;
Pred. No. 4.7e+05;
1; Mismatches
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Last annotation update)
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Pred. No.
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"The structure of new peptides from the Australin red tree frog
'Litoria rubella'. the skin peptide profile as a probe for the
of evolutionary trends of amphibians.";
Aust. J. Chem. 49:955-963(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Litoria rubella (Desert tree frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
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P82072; O1-MAY-2000 (TrEMBLrel. 13, Created)
O1-MAY-2000 (TrEMBLrel. 13, Last seq
O1-MAY-3000 (TrEMBLrel. 13, Last ann
RUBELLIDIN 3.1.
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"The structure of new peptides from the Australin red tree frog Litoria rubella'. the skin peptide profile as a probe for the sfevolutionary trends of amphibians.";
Aust. J. Chem. 49:955-963(1996).
-!- FUNCTION: CAERIDINS SHOW NEITHER NEUROPEPTIDE ACTIVITY NOR ANTIBIOTIC ACTIVITY.
-!- TISSUE SPECIFICITY: SECRETED BY THE SKIN DORSAL GLANDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE-SKIN SECRETION;
Steinborner S.T., Wabnitz P.A., Waugh R.J., Bowie J.H., Gao C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE, AND MASS SPECTROMETRY.
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SEQUENCE 5 AA;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
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01-MAY-2000 (TrEMBLrel. 13,
01-MAY-2000 (TrEMBLrel. 13,
01-MAY-2000 (TrEMBLrel. 13,
                                            Amphibian skin; Amidation.
MOD_RES 5 5
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                                                                                                            TISSUE SPECIFICITY: SECRETED BY THE SKIN DORSAL GLANDS MASS SPECTROMETRY: MM-655; METHOD=FAB.
                                                                                                                                                                                                                                        t. J. Chem. 49:955-963(1996).
FUNCTION: CAERIDINS SHOW NEITHER NEUROPEPTIDE ACTIVITY NOR
                                                                                                                                                                                                          ANTIBIOTIC ACTIVITY.
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656 MW; 71A9C9CB10300000 CRC64;
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Pred. No. 4.7e+05;
1; Mismatches 0; Indels
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                                                                                              TISSUE=SKIN SECRETION;
Wabnitz P.A., Bowie J.H., Tyler M.J., Wallace J.C.;
Peptides from the skin glands of the Australian buzzing tree frog
Litori electrica. Comparison with the skin peptides from Litoria
rubella.";
     SEQUENCE
                                               Amphibian skin; Amidation.
                                                                                                                                                                                                                                                                                                                     Amphibia; Batrachia;
                                                                                                                                                                                                                                                                                                                                           Litoria rubella (Desert tree frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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01-MAY-2000 (TREMBLIEL 13,
01-MAY-2000 (TREMBLIEL 13,
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P82099;
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SEQUENCE 5 AA; 570 MW;
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-1- TISSUE SPECIFICITY: SECRETED BY THE SKIN DORSAL GLANDS.
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Wabnitz P.A., Bowie J.H., Tyler M.J., Wallace J.C.;
"Peptides from the skin glands of the Australian buzzing tree frog
Litori electrica. Comparison with the skin peptides from Litoria
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                                                                           J. Chem. 52:0-0(1999).
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  5 AA; 630 MW;
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668761F2C9A00000 CRC64;
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OM protein -
protein search, using sw model
                                                         GenCore version 4.5
Copyright (c) 1993 - 2000 Com
                                                           Compugen Ltd
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Perfect score: Title: US-09-281-760C-2 18

April 21,

2002, 10:44:57 ;

Search time 17.3 Seconds (without alignments) 10.597 Million cell updates/sec

Scoring table: BLOSUM62

Searched: 100059 seqs, 36664827 residues Gapop 10.0 , Gapext 0.5

Total number of hits satisfying chosen parameters:

29

inimum DB aximum DB seq length: 0
seq length: 5

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 50 summaries

Database : Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. SwissProt_39:*

SUMMARIES

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Result No.	Score	Query Match	Length	DB	ID	cription
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æ	5	27.8	4	Н	FMRF_MACNI	P01162 macrocallis
9	5	27.8	4	Ľ	TUFT_HUMAN	homo sapie
10	G	27.8	5	H	BIOB_SALTY	8
11	S	27.8	5	1	UF01_MOUSE	9
12	4	22.2	ω	_	GRWM_HUMAN	P01157 homo sapien
13	ω	16.7	4	_	ACH1_ACHFU	P35904 achatina fu
14	ω	٠	ហ	_	PAP2_PARMA	
15	ω	٠	رب ر	1	SUGA_ACHDO	
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17	ω	16.7	U	-	UC22_MAIZE	
18	N	11.1	ω	Н	LUXE_VIBFI	2
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FAR3_HIRME
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Matches 2
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=92195954; PubMed=1686933;
Evans B.D., Pohl J., Kartsonis M.A., Calabrese R.L.;
"Identification of RFamide neuropeptides in the medicinal leech.";
Peptides 12:897-908(1991).
-!- SIMILARITY: BELONGS TO THE FARP (FMRFAMIDE RELATED PEPTIDE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FAR3_HIRME STANDARD; PRT; 4 AA. P42562; 01-NOV-1995 (Rel. 32, Created) 01-NOV-1995 (Rel. 32, Last sequence update) 01-NOV-1995 (Rel. 32, Last annotation update) FMRFAMIDE-LIKE NEUROPEPTIDE YLRF-AMIDE.
                                                                                                                                                                                                                                                                                                                                                      Neuropeptide; Amidation.
MOD_RES 4 4
SEQUENCE 4 AA; 598 MW
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Eukaryota; Metazoa; Annelida; Clitellata; Hirudinida; Arynchobdellida; Hirudiniformes; Hirudinidae; Hirudo. NCBI_TaxID=6421;
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-!- SIMILARITY: BELONGS TO THE ALLATOSTATIN FAMILY.
Neuropeptide; Amidation; Multigene family.
MOD_RES 5 AMIDATION (POTENTIAL).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE=Cerebral ganglion, and Thoracic ganglion;
MEDLINE=98121193; PubMed=9461295;
Duve H., Johnsen A.H., Maestro J.-L., Scott A.G., Jaros P.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE
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142563;
01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
01-NOV-1995 (Rel. 32, Last annotation update)
132, Last annotation update)
14 FAMIDE-LIKE NEUROPEPTIDE YMRF-AMIDE.
15 Hirudo medicinalis (Medicinal Leech).
16 Eukaryota, Metazoa; Annelida; Clitellata; Hirudinida; Hirudinea;
16 Arynchobdellida; Hirudiniformes; Hirudinidae; Hirudinea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE-92195954: PubMed-1686933;
Evans B.D., Pohl J., Kartsonis M.A., Calabrese R.L.;
"Identification of Remande neuropeptides in the medicinal leech.";
Peptides 12:897-908(1991).
-i- SIMILARITY: BELONGS TO THE FARP (FMRFAMIDE RELATED PEPTIDE)
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Eukaryota, Metazoa; Platyhelminthes; Turbellarian Platyhelminths;
Rhabditophora; Seriata; Tricladida; Terricola; Geoplanidae;
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MEDLING-94211927; PubMed-7909164;

Maule A.G., Shaw C., Halton D.W., Curry W.J., Thim L.;

"RYIRFamide: a turbellarian FMRFamide-related peptide (FaRP).";

Regul. Pept. 50:37-43(1994).
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21-JUL-1986 (Rel. (
01-FEB-1995 (Rel. )
PROCTOLIN.
                                                                                                                                                           PSK_DAUCA
P58261;
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'Identification and immunocytochemical localization of proctolin in pericardial organs of the shore crab, Carcinus maenas.";

Peptides 7:67-72(1986).

1- FUNCTION: STINULATES CARDIAC OUTPUT AND HINDGUT MOTILITY,
MODULATES VISCERAL AND SKELETAL MUSCLE IN MANY ARTHROPODS.

1- TISSUE SPECIFICITY: FOUND IN THE LATERAL WHITE NEURONS AND IN THE CRAB PERICARDIAL ORGANS.

PIR; A01644; HOROHA.

PIR; A01641; A60411.
                                             20-AUG-2001 (Rel. 40, Created)
20-AUG-2001 (Rel. 40, Last sequence update)
20-AUG-2001 (Rel. 40, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
PHYTOSULFOKINE-ALPHA (PSK-ALPHA) [CONTAINS: PHYTOSULFOKINE-BETA (PSK-PHYTOSULFOKINE-BETA (PSK-PHYTOSULFOKINE) (PSK-PHYTOSULFOKINE-BETA (PSK-PHYTOSULFOKINE) (PSK-PHYTOSULFOKINE) (PSK-PHYTOSULFOKINE) (PSK-PHYTOSULFOKINE) (PSK-PHYTOSU
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MEDLINE=86232789; PubMed=2872661;
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MEDLINE-90287800; PubMed-2356151;
Groome J. R., Tillinghast E.K., Townley M.A., Vetrovs A.,
Watson W.H. III, Hunt D.F., Griffin P.R., Alexander J.E.,
Shabanowitz J.;
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MEDLINE-81225865; PubMed=6113690;

O'Shea M., Adams M.E.;

"Pentapeptide (proctolin) associated with an identified neuron.";

Science 213:567-569(1981).
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MEDLINE=76074708; PubMed=576;
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Limulus polyphemus (Atlantic horseshoe crab), and
Carcinus maenas (Common shore crab) (Green crab),
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Orthopteroidea; Dictyoptera; Blattaria;
Daucus carota (Carrot)
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"Structure of the pentapeptide proctolin, a proposed neurotransmitter in insects.";
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T-cell receptor be	T-cell receptor be	seminal plasma pro	Ig heavy chain CRD	hypothetical prote	neuropeptide - sea	hypothetical prote	R-phycoerythrin al	major protein anti	alkanal monooxygen	primase - Citrobac	peptidyl-dipeptida	ubiquitin - rat	T-cell receptor be	<pre>FMRFamide - polych</pre>	autho-RF amide neu	neuropeptide Antho	neuropeptide Antho	phospholipase C (E	hypothetical prote	cardioexcitatory n

R-phycoerythrin gamma-A chain - red alga (Gastroclonium coulteri) (fragment) c;Species: Gastroclonium coulteri C;Species: Gastroclonium coulteri C;Date: 07-Mar-1988 #sequence_revision 07-Mar-1988 #text_change 23-Mar-1993 C;Accession: F22565 A;Reference number: A22565; A;Accession: A22565 A;Molecule type: protein A;Residues: 1-3 <KLO> C;Accession: A22565 R;KiOtz, A.V.; Glazer, A.N. J. Biol. Chem. 260, 4856-4863, A;Title: Characterization of t. R-phycoerythrin alpha-1 chain - red alga (Gastroclonium coulteri) (fragment) C;Species: Gastroclonium coulteri C;Date: 07-Mar-1988 #sequence_revision 07-Mar-1988 #text_change 23-Mar-1993 R;Klotz, A.V.; Glazer, A.N.
J. Biol. Chem. 260, 4856-4863, 1985
A;Title: Characterization of the bilin attachment sites in R-phycoerythrin. RESULT F22565 DЪ A; Molecule type: protein A; Residues: 1-5 < KLO> Qy A;Reference number: A22565; MUID:85182601 A;Accession: F22565 Ъ δÃ Query Match Best Local S Matches 2 Matches Query Match Best Local N YR 2 YR 5 N Similarity 2; Conserv Similarity 2; Conserv ω 66.7%; S llarity 100.0%; Conservative 0; Conservative 66.7%; but 100.0%; Pro of the bilin attachment sites; MUID:85182601 1985 ; Score 12; DB b; Pred. No. 2.2 0; Mismatches Score 12; Pred. No. Mismatches DB 2; L 2.2e+05; 2.: .2e+05; s 0; 2; Length Length Indels Indels in R-phycoerythrin 0; 0; Gaps Gaps 0; 0;

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blood cell protein A - Molgula manhattensis (fragment)
c;Species: Molgula manhattensis
c;Species: Molgula manhattensis
c;Date: 19-Mar-1997 #sequence_revision 29-Aug-1997 #text_change 11-Jun-1999
c;Accession: S68328
R;Taylor S;M.; Ross, M.M.; Waite, J.H.
Arch. Blochen. Blophys. 324, 228-240, 1995
A;Title: Novel 3,4-di. and 3,4,5-trihydroxyphenylalanine-containing polypeptides from the A;Reference number: S68325; MUID:96132650
A;Accession: S68328
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A;Residues: 1-3 <LAC>
C;Reywords: amidated carboxyl end; pyroglutamic acid
E;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;3/Modified site: amidated carboxyl end (Pro) #status experimental
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J. Biol. Chem. 267, 17508-17511, 1992
A;Title: Isolation and structural determination of a novel TRH-like tripeptide, pyroGlu-A;Reference number: A43391; MUID:92388092
A;Accession: A43391
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C;Species: Bacillus subtilis
C;Date: 12-Aug-1996 #sequence_revision 12-Aug-1996 #text_change 21-Jul-2000
C;Accession: I40469
R;Struck, J.C.; Hartmann, R.K.; Toschka, H.Y.; Erdmann, V.A.
Mol. Gen. Genet. 215, 478-482, 1989
A;Title: Transcription and processing of Bacillus subtilis small cytoplasmic A;Reference number: I40469, MUD1:89218958
A;Accession: I40469
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T;RE-Cles: Medicago sativa (alfalfa)
C;Date: 30-Sep-193 #sequence_revision 30-Sep-1993 #text_change 07-May-1999
C;Accession: A43391
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A; Residues: 1-5 < RES>
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DB 2; Length 3; . 2.2e+05;
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RESULT
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C;Keywords: oxidoreductase
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A; Accession: S09478
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J. Biol. Chem. 264, 2175-2179, 1989
A;Title: Isolation of typosine-melanocyte-stimulating hormone release-inhibiting fact
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Maximum Match 100%
Listing first 50 summaries
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Gapop 10.0 ,
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Copyright (c) 1993 - 2000
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/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/FCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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US-09-214-614-2
US-08-968-676-27
US-08-968-676-27
US-08-428-488-59
US-08-428-488-60
US-08-428-488-62
US-08-428-488-63
US-08-428-488-65
US-08-428-488-66
US-08-428-488-69
US-08-428-488-71
US-08-428-488-71
US-08-428-488-72
US-08-428-488-73
US-08-428-732-20
US-08-428-732-20
US-08-335-118-25
US-08-441-871-63
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Compugen Ltd.
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                                                       Sequence 2, Appli sequence 4, Appli sequence 60, Appli sequence 61, Appli sequence 62, Appli sequence 62, Appli sequence 63, Appli sequence 64, Appli sequence 65, Appli sequence 67, Appli sequence 67, Appli sequence 67, Appli sequence 71, Appli sequence 71, Appli sequence 72, Appli sequence 73, Appli sequence 73, Appli sequence 74, Appli sequence 73, Appli sequence 74, Appli sequence 75, Appli sequence 76, Appli sequence 77, Appli sequence 78, Appli sequence 79, Ap
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	US-08-441-871-66 US-08-441-871-68 US-08-441-871-68 US-08-441-871-70 US-08-473-022-2 US-08-0705-660-27 US-08-0705-660-27 US-08-08-705-660-28 US-08-08-705-660-28 US-08-08-685-589A-6 US-08-08-685-589A-6 US-08-08-747-137-78 US-08-08-74-138-20 US-08-08-74-138-20 US-08-08-74-138-20 US-08-08-74-138-20 US-08-08-08-74-28 US-08-08-08-78-28 US-08-08-08-28 US-09-082-593-11 US-09-082-593-11 US-09-082-593-11 US-09-083-502-4 PCT-US93-01669-16 US-09-083-502-4 PCT-US93-01669-16 US-09-083-502-4 PCT-US93-01669-16 US-08-08-798-2 US-08-08-79	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
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	sequence	5312899-1	PCT-US96-08798-2	PCT-US93-01669-16	PCT-US92-09752-4	US-09-058-562-4	US-09-082-593-11	US-09-047-986B-20	-08	-08-989	-08	-08	-08	80-	90-	30-	80-	-80-	-80-	-08-473-022	-08-441-871	-08-441-871	-08-441-871	

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RESULT 1
US-09-214-614-2
                                                                                       ; MOLECULE TYPE: US-09-214-614-2
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                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Grund, Alan D.
APPLICANT: Maurina-Brunker,
                                                                                                                                                                                      TELEFAX: 303/863-0223
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                     FILING DATE:
CLASSIFICATION: 435
CLASSIFICATION: 435
ATTORNEY_AGENT INFORMATION:
NAME: Connell, Gary J.
REGISTRATION NUMBER: 32,0
                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 31
TELECOMMUNICATION INFORMATION:
TELEPHONE: 303/863-9700
                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: Colorado
COUNTRY: U.S.A
                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 80203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Denver
                                                                                                                                                      LENGTH:
                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: Sheridan Ross P.C. STREET: 1700 Lincoln Street,
                                                                                                                                     amino acid
                                                                                                                                                      2 amino acids
                                                                                                                       linear
                                                                                                       peptide
                                                                                                                                                                                                                                                            , Gary J.
, Gary J.
TABER: 32,020
66.7%; bu
100.0%; Pr
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     Score 12; DB ; Pred. No. 1.6 0; Mismatches
                                                                                                                                                                                                                                                         3161-15-PCT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Suite 3500
                                        DB 4;
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                                      Length
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Matches

Local

Similarity 2; Conserv

Conservative

1.6e+05; hes 0;

Indels

0;

Gaps

0;

4 YR 5

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NAME: Farrell, Kevin M
REGISTRATION NUMBER: 35,05
REFERENCE/DOCKET NUMBER: REH-\
TELECOMMUNICATION INFORMATION:
TELEPHONE: (207) 363-0558
INFORMATION FOR SEQ ID NO: 27:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
LENCTH: 3 amino acids
TYPE: amino acids
STRANDEDNESS: single
TOPOLOGY: Linear
OPOLOGY: PERIORE
US-08-968-676-27
                                                                                                                                                                                                                           US-08-240-712-4
Sequence 4, Application US/08240712
Patent No. 5599907
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:

APPLICANT: Humphreys, Robert E
APPLICANT: Adams, Sharlene
APPLICANT: Adams, Sharlene
TITLE OF INVENTION: IMMUNOTHERAPY BY MODULATION OF ANTIGEN
NUMBER OF SEQUENCES: 165
CORRESPONDENCE ADDRESS:
ADDRESSEE: Kevin M. Fairell, P.C.
STREET: P.O. Box 999
CITY: York Harbor
STATE: ME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 03911

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: US/08/968,676
FILING DATE:
                                                                                                  APPLICANT: ANDERSON, DAVID C.
APPLICANT: MATHEWS, ANTONY JAMES
APPLICANT: STETLER, GARY L.
TITLE OF INVENTION: PRODUCTION AND USE OF MULTIMERIC
TITLE OF INVENTION: HEMOGLOBINS
NUMBER OF SEQUENCES: 35
                                  CORRESPONDENCE ADDRESS:
ADDRESSEE: Browdy and Neimark
STREET: 419 Seventh Street, N.W., Suite 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Farrell, Kevin M
STREET: 419 Sever CITY: Washington STATE; D.C.
                                                                                                                                                                                                                                                                                                                                                                                  1 YR 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 100 les 2; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 YR 2
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100.0%; Pred. No. 1.6e+05;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REH-9601
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TELEX: 24863
; INFORMATION FOR SEQ ID NO: 4
; SEQUENCE CHARACTERISTICS:
; LENGTH: 4 amino acids
; TYRE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-240-712-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 4
US-08-428-488-59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 59, Application US/08428488
Patent No. 5624894
GENERAL INFORMATION:
APPLICANT: BODOR, Nicholas S.
APPLICANT: BODOR, Nicholas S.
TITLE OF INVENTION: BRAIN-ENHANCED DELIVERY OF NEUROACTIVE
TITLE OF INVENTION: DEPTIDES BY SEQUENTIAL METABOLISM
NUMBER OF SEQUENCES: 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match 66.7%; Score 12; DB 1; Best Local Similarity 100.0%; Pred. No. 1.6e+05; Matches 2; Conservative 0; Mismatches 0;
             CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Baumaister, Mary Katherine
REGISTRATION NUMBER: 26,254
REFERENCE/DOCKET NUMBER: 028724-087
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 835-6620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION UNMBER: PCT/US92/09752
APPLICATION UNMBER: PCT/US92/09752
PILING DATE: 13-MAY-1993
ATTORNEY_ACENT INFORMATION:
NAME: COOPER, IVER P
REGISTRATION NUMBER: 28,005
REFERENCE/DOCKET NUMBER: ANDERSON-6
TELEPOMMUNICATION INFORMATION:
TELEPOMS: 202-737-3528
TELEPAX: 202-737-3528
                                                                                                                                                                   COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOCTWARE: Patentin Release #1.0, V
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/428,488
FILING DATE: 27-APR-1995
CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION UNUBER: US/08/240,712
FILING DATE: 09-MAY-1994
FILING DATE: 09-MAY-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 YR 4
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                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: P.O. Box
CITY: Alexandria
STATE: Virginia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4 YR 5
                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: Burns, Doane, Swecker & Mathis STREET: P.O. Box 1404
                                                                                                                                                                                                                                                                                                                                                                                  RY: United States
22313-1404
(703) 836-2021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            USA
                                                                                                                                                                                                                                                              Release #1.0, Version #1.25
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                                                                       028724-087
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Database
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Maximum Match 100%
Listing first 50 summaries
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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                                                                                                             April 21, 2002, 10:18:10 ; Search time 40.45 Seconds (without alignments) 9.156 Million cell updates/sec
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Gapop 10.0 , Gapext 0.5
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SUMMARIES

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Analgesic peptide	Analgesic peptide.	Analgesic peptide.	Analgesic tetrapep	Analgesic enkephal	Enkephalin analogu	Opioid peptide SEQ	Anti-inflammatory	Analgesic peptide.	Opioid peptide SEQ	Generic immunogeni	Description

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ALIGNMENTS

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RESULT
        09-APR-1998;
30-MAR-1999;
                                09-APR-1999;
                                                                                           Key
Misc-difference
                                                                                                                       Synthetic.
                                                                                                                                      Immunogenic; autoimmunity; IgE autoantibody; immunoglobulin E;
allergy; canine; prophylaxis; treatment.
                                                                                                                                                                              19-APR-2000 (first entry)
                                                                                                                                                                                              AAY69581;
                                                                                                                                                                                                             AAY69581 standard; peptide;
                                                                EP955311-A2
                                                                                                                                                               Generic immunogenic peptide SEQ ID NO:6, for anti-IgE Ab generation.
                                                10-NOV-1999
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        98US-0058332.
99US-0281761.
                                99EP-0107020.
                                                                                               Location/Qualifiers 2..3
                                                                               /note= "Xaa is any amino acid"
                                                                                         /label= Xaa
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Sequences AAY69576-Y69586 and AAY69598-Y69599 represent peptides that may CC be used to induce anti-IgE (immunoglobulin E) autoantibodies in a dog. CG IgE is an important mediator of canine allergic responses, including Type CC I immediate hypersensitivity. It is estimated that up to 30% of all dogs common the first from allergies or allergy-related skin disorders, and allergic CC dermatitis is thought to affect between 3 and 15% of dogs. Common canine CC allergens include fleas, pollens, moulds and dust, with flea allergy being the most frequent. Once IgE has been released in response to dealergen, the IgE binds to receptors on mast cells. The IgE molecules CC can then become cross-linked, which induces the mast cells or release CC histamine, which leads to the manifestation of allergic symptoms. The peptides of the invention correspond to epitopes of canine IgE, or conservative variations thereof, that are accessible in circulating IgE but not in IgE bound to mast cells. The autoantibodies produced on CC immunisation with such peptides therefore target only circulating IgE, avoiding the possibility that they may cross-link bound IgE molecules, which would exacerbate an ongoing allergic response even in the absence CC symptoms by downregulating IgE production results in an immune response that targets the IgE-expressing B call, which affects IgE symptoms to a dog.

Expression by downregulating IgE production by B cells and/or targetting CC symptoms in a dog.
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Best Local :
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17-MAY-1999;
10-SEP-1999;
15-OCT-1999;
                                                                                                                                                                                                                                                                                Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                             Protection; endogenous therapeutic peptide; peptidase; conjugation; blood component; modification; succinimidy]; maleimido group; amino; hydroxyl; thiol; hormone; growth factor; neurotransmitter.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Opioid peptide SEQ ID NO:914.
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                                                                                                                  17-MAY-2000; 2000WO-US13576.
                                                                                                                                                                        23-NOV-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-JUN-2001 (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lawton R,
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         99US-0134406.
99US-0153406.
99US-0159783.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes a modified therapeutic peptide (I) comprising a therapeutically active amino acid region (III) and a comprising a therapeutically active amino acid region (III) and a comprising at the present control of the present in the peptides of a components to form a peptidase stabilised therapeutic peptide composed of a components to form a peptidase stabilised therapeutic peptides e.g. hormones, growth cactors and neurotransmitters, to protect them from peptidase activity in vivo for the treatment of various disorders. Endogenous therapeutic peptides are not suitable as drug candidates as they require frequent administration due to rapid degradation by peptidases in the body. Abdolisying and attaching therapeutic peptides to albumin prevents or reduces the action of peptidases to increase length of activity (half intracellular uptake and interference with physiological processes. AbB90129 to AbB9012
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Matches 2
                                      11-SEP-1995;
                                                                                                                                                                                                                                                                             Modified-site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Opioid receptor; treatment; prevention; pain; cancer; analgesic.
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                                                                                        10-SEP-1996;
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                                      95JP-0232161
                                                                                        96WO-JP02572.
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                                                                                                                                                                                                                                                       /note= "Phe-N(CH3)-CH2-CH2-COOH"
                                                                                                                                                                                                                                                                                                          /note= "D-form residue"
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01-MAY-2000 (TrEMBLTel. 1
01-MAY-2000 (TrEMBLTel. 1
                                                                                                                                                                                                                                                                 Amphibian skin.
SEQUENCE 5 AA
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Litoria rubella, the skin peptide profile as a probe
of evolutionary trends of amphibians.";
Aust. J. Chem. 49:955-963(1996).
-!- FUNCTION: CAERIDINS SHOW NEITHER NEUROPEPTIDE ACTIVATIONS.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE-SKIN SECRETION;
Steinborner S.T., Wabnitz P.A., Waugh R.J.,
Tyler M.J., Wallace J.C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-91282758; PubMed-1840486;
Sato H., Aono S., Kashiwamata S., Koiwai O.;
"Genetic defect of bilirubin UDP-glucuronosyltransferase in th
hyperbilirubinent Gunn rat.";
Biochem. Biophys. Res. Commun. 177:1161-1164(1991).
-!- FUNCTION: UDPGT IS OF MAJOR IMPORTANCE IN THE CONJUGATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rattus norvegicus (Rat).
Rattus norvegicus (Chordata;
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                          ANTIBIOTIC ACTIVITY.
-i- TISSUE SPECIFICITY: SECRETED BY THE SKIN-i- MASS SPECTROMETRY: MW=598; METHOD=FAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCB1_TaxID=104895;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Litoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Amphibia; Batrachia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Litoria rubella (Desert tree frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RUBELLIDIN 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
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-!- SUBCELLULAR LOCATION:
EMBL; S38636; AAB19259.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN-GUNN
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UDP-GLUCURONOSYLTRANSFERASE, MICROSOMAL (EC 2.4.1.17)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (FRAGMENT)
                                                                                           Local Similarity hes 0; Conserv
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CATALYTIC ACTIVITY: UDP-GLUCURONATE + ACCEPTOR = UDP + 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AND MASS SPECTROMETRY.
                                                                                                                                                                                                                                                                 5 AA;
                                                                                               Conservative
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                                                                                                                                                                                                                                                                 598 MW;
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13,
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                                                                                                                                                                                                                                                                 6DD9C9CAB2A00000 CRC64;
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                                                                                        Score 3; DB 13;
Pred. No. 4.7e+05;
1; Mismatches
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Last sequence update)
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Pred. No.
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Best Local S
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SEQUENCE
                                                      Steinborner S.T., Wabbitz P.A., Waugh R.J., Bowie J.H., Gao C.,
Tyler M.J., Wallace J.C.;
"The structure of new peptides from the Australin red tree frog
'Litoria rubella'. the skin peptide profile as a probe for the study
of evolutionary trends of amphibians.";
Aust. J. Chem. 49:955-963(1996).
-I- FUNCTION: CAERIDINS SHOW NEITHER NEUROPEPTIDE ACTIVITY NOR
ANTIBLOTIC ACTIVITY.
-I- TISSUE SPECIFICITY: SECRETED BY THE SKIN DORSAL GLANDS.
-I- MASS SPECTROMETRY: MW-655; METHOD-FAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Steinborner S.T., Wabhitz P.A., Waugh R.J., Bowle J.H., Gao C., Tyler M.J., Wallace J.C.;
"The structure of new peptides from the Australin red tree frog "Litoria rubella", the skin peptide profile as a probe for the of evolutionary trends of amphibians.";
Aust. J. Chem. 49:955-963(1996).
1- FUNCTION: CAERIDINS SHOW NEITHER NEUROPEPTIDE ACTIVITY NOR ANTIBIOTIC ACTIVITY. SECRETED BY THE SKIN DORSAL GLANDS.
                                                                                                                                                                                                                                                                                         Litoria rubella (Desert tree frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
                                                                                                                                                                                                                                                                                                                                                        P82072 PRELIMINARY; PRT; 5 AA.
P82072;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
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01-MAY-2000 (TrEMBLrel. 13, Last seq
01-MAY-2000 (TrEMBLrel. 13, Last ann
RUBELLIDIN 2.1.
                             Amphibian skin; Amidation. MOD_RES 5 5
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphiba; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
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01-MAY-2000
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nes 0; Conserv
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            5 AA;
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llarity 0.0%;
Conservative
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          5 AMIDATION.
656 MW; 71A9C9CB10300000 CRC64;
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Pred. No. 4.7e+
1; Mismatches
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Last annotation update)
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Matches 0
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Best Local :
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SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
RUBELLIDIN 3.2.
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Litoria rubella (Desert tree frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
                                                                                                                                                              Litoria rubella (Desert tree frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE-SKIN SECRETION;
Wabbitz P.A., Bowie J.H., Tyler M.J., Wallace J.C.;
Paptides from the skin glands of the Australian buzzing tree frog
Litori electrica. Comparison with the skin peptides from Litoria
                                                             Wabnitz P.A., Bowie J.H., Tyler M.J., Wallace J.C., Peptides from the skin glands of the Australian buzzing Litori electrica. Comparison with the skin peptides from
                                                                                                                                                                                                                   Ol-MAY-2000 (TIEMBLEEL 13, Created)
Ol-MAY-2000 (TIEMBLEEL 13, Last sequence update)
Ol-MAY-2000 (TIEMBLEEL 13, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUST. J. Chem. 52:0-0(1999).

1- FUNCTION: CAERIDINS SHOW NEITHER NEUROPEPTIDE ACTIVITY NOR ANTIBIOTIC ACTIVITY.

1- TISSUE SPECIFICITY: SECRETED BY THE SKIN DORSAL GLANDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 P82073
SEQUENCE
             Amphibian skin; Amidation.
MOD_RES 5 5
                                              rubella.";
                                                                                                   TISSUE=SKIN SECRETION;
                                                                                                                 SEQUENCE
                                                                                                                                       NCBI_TaxID=104895;
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                                     J. Chem. 52:0-0(1999).
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0; Conserv
5 AA;
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630 MW;
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AMIDATION.
668761F2C9A00000 CRC64;
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1; M
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Pred. No. 4.7e+05;
1; Mismatches 0;
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Pred. No. 4.7e+05;
Pred. No. 4.7e+05; Indels
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Query Match

16.7%;

Score

ω

DB 13;

Length

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OM protein - protein search, using sw model
                                                      Run on:
April 21, 2002, 10:38:51; Search time 17.3 Seconds (without alignments) 10.597 Million cell updates/sec
                                                                                                                                                                              GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd.
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Title:
Perfect score:
Sequence: US-09-281-760C-1 18 1 LXXYR 5

Scoring table: BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: 100059 seqs, 36664827 residues

Total number of hits satisfying chosen parameters: 29

nimum DB seq length: 0 ximum DB seq length: 5

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 50 summaries

Database : SwissProt_39:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	ω	2	1	No.	*Result
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28002	P36515	P02731	P13973	P30425	P12997	P12677	P13071	P19918	P19916	P01151	P24272	P80628	P54714	P19991	P81864	P35904	P01157	P38639	P12678	P01858	P01162	P42561	P58261	P01373	P41853	P81817	P42563	P42562	Description	
chiamydia t	saccharomyc	homo sapien	escherichia	bothrops in	citrobacter	salmonella	citrobacter	pseudomonas	pseudomonas	sus scrofa	۳.	zea mays (m	canis famil	acheta dome	pardachirus	achatina fu	homo sapien	mus musculu	salmonella	homo sapien	macrocallis	hirudo medi	daucus caro	periplaneta	artioposthi	carcinus ma	hirudo medi	hirudo medi	otion	

ALIGNMENTS

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RESULT 3 AL14_CARMA ID AL14_CARMA STANDARD; PRT; 5 AA. AC P81817;	Qy 4 Y 4 Db 1 Y 1	Ouery Match 38.9%; Score 7; DB 1; Length 4; Best Local Similarity 100.0%; Pred. No. 1e+05; Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps		DT 01-NOV-1995 (Rel. 32, Created) DT 01-NOV-1995 (Rel. 32, Last sequence update) DT 01-NOV-1995 (Rel. 32, Last sequence update) DT 01-NOV-1995 (Rel. 32, Last annotation update) DE FMRFAMIDE-LIKE NEUROPEPTIDE YMRF-AMIDE. OS Hirudo medicinalis (Medicinal leech). OC Eukaryota; Metazoa; Annelida; Clitellata; Hirudinida; Hirudinea; OC Arynchobdellida; Hirudiniformes; Hirudinidae; Hirudo. OX NCBL_TaxID=6421; RN [1]	QY 4 Y 4 Db 1 Y 1 RESULT 2 FAR4_HIRME STANDARD; PRT; 4 AA.	SQ SEQUENCE 4 AA; 598 MW; 69D4073B30000000 CRC64; SQ SEQUENCE 4 AA; 598 MW; 69D4073B30000000 CRC64; Ouery Match Best Local Similarity 100.0%; Pred. No. 1e+05; Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps		RESULT 1 FAR3_HIRME STANDARD; PRT; 4 AA. 1
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AC P01373
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p4.1853;
01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
01-NOV-1995 (Rel. 32, Last annotation update)
01-NOV-1995 (Rel. 32, Last Annotation update)
EMREAMIDE_LIKE NEUROPEPTIDE RYINF-AMIDE.
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30-MAY-2000 (Rel.
30-MAY-2000 (Rel.
CARCINUSTATIN 14.
PRCT_PERAM
P01373;
                                                                                                                                                                                                                                                                                                                                                                                               Artioposthia triangulata.
Eukaryota: Metazoa: Platyhelminthes; Turbellarian Platyhelminths;
Rhabditophora; Seriata; Tricladida; Terricola; Geoplanidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PROJECT AND ADDITION OF MUITIPLE NEUROPEPTIDES OF THE ALACOSTATIN AND IDEATOR.

**ISOLATION AND ACT AS A NEUROTRANSMITTER OR NEUROMODULATOR.

-!- FUNCTION: MAY ACT AS A NEUROTRANSMITTER OR NEUROMODULATOR.

-!- SIMILARITY: BELONGS TO THE ALLATOSTATIN FAMILY.

Neuropeptide: Amidation; Multigene family.

MOD.RES

5

AMIDATION (POTENTIAL).

SEQUENCE 5 AA; 586 MW; 672879D5AB300000 CRC64;
                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                             Neuropeptide; Amidation. MOD_RES 5 5
                                                                                                                                                                                                                                                                     MEDIINE-94211927; PubMed-7909164;
Maule A.G., Shaw C., Halton D.W., Curry W.J., Thim L.;
"RYIRFamide: a turbellarian FMRFamide-related peptide (FaRP).";
Regul. Pept. 50:37-43(1994).
-i- SIMILARITY: BELONGS TO THE FARP (FMRFAMIDE RELATED PEPTIDE)
                                                                                                                                                                                                                                                                                                                                                SEQUENCE, AND SYNTHESIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE-Cerebral ganglion, and Thoracic ganglion; MEDLINE-98121193; PubMed-9461295;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Carcinus maenas (Common shore crab) (Green crab).
Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca;
Eumalacostraca; Eucarida; Decapoda; Plecoyemata; Brachyura;
Eubrachyura; Portunoidea; Portunidae; Carcinus.
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                                                                                                                                                         Similarity
                                                                                                                                                                                                                5 AA; 754 MW;
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             STANDARD;
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100.0%; Pred. No. 1e-
tive 0; Mismatches
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69D4004B44600000 CRC64;
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Pred. No.
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21-JUL-1986
01-FEB-1995
                                                                                                                                                                                                                                                                                                              PIK; ...
Neuropeptide.
                                                                                          PSK_DAUCA
P58261;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SPECIES=1, polyphemus;
MEDLINE=90287800; PubMed=2356151;
MEDLINE=90287800; PubMed=2356151;
Groome J.R., Tillinghast E.K., Townley M.A., Vetrovs A.,
Watson W.H. III, Hunt D.F., Griffin P.R., Alexander J.E.,
Shabanowitz J.;
Shabanowitz J.;
"Identification of proctolin in the central nervous system of the horseshoe crab, Limulus polyphemus.";
Peptides 11:205-211(1990).
                        20-AUG-2001 (Rel. 40, Created)
20-AUG-2001 (Rel. 40, Last sequence update)
20-AUG-2001 (Rel. 40, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
PHYTOSULFOKINE-ALPHA (PSK-ALPHA) [CONTAINS: PHYTOSULFOKINE-BETA (PSK-
                                                                                                                                                                                                                                                                                                                                                      THE CRAB PERICARDIAL ORGANS. PIR; A01644; HOROHA. PIR; A60411; A60411.
                                                                                                                                                                                                                                                                                                                                                                                                                                             Stangier J., Dircksen H., Keller R.;
"Identification and immunocytochemical localization of proctolin in pericardial organs of the shore crab, Carcinus maenas.";
Peptides 7:67-72(1986).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SPECIES=C.maenas;
MEDLINE=86232789; PubMed=2872661;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SPECIES=P.americana;
MEDLINE-01228065; PubMed=6113690;
O'Shea M., Adams M.E.;
"Pentapeptide (proctolin) associated with an identified neuron.";
Science 213:567-569(1981).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Starratt A.N., Brown B.E.;
Starratt A.N., Brown B.E.;
"Structure of the pentapeptide proctolin, a proposed neurotransmitter in insects.";
Life Sci. 17:1253-1256(1975).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Carcinus maenas (Common shore crab) (Green crab).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Orthopteroidea; Dictyoptera; Blattaria;
Blattoidea; Blattidea; Periplaneta.
NCBI_TaxID=6978, 6850, 6759;
                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                   -i FUNCTION: STIMULATES CARDIAC OUTPUT AND HINDGIT MOTILITY, MODULATES VISCERAL AND SKELETAL MUSCLE IN MANY ARTHROPOOS.
-i- TISSUE SPECIFICITY: FOUND IN THE LATERAL WHITE NEURONS AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BIOLOGICAL SOURCE
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MEDLINE=76074708; PubMed=576;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Periplaneta americana (American cockroach),
Limulus polyphemus (Atlantic horseshoe crab),
Daucus carota (Carrot)
              BETA)]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE.
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01, Last sequence up
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Result
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Perfect score:
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Maximum Match 100%
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   April 21, 2002, 10:32:30 ; Search time 25.34 Seconds (without alignments) 15.030 Million cell updates/sec
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Copyright (c) 1993 - 2000 Compugen Ltd.
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protamine P1 - Cer
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pap fimbrial regul
ribosomal protein
ribosomal protein
ribosomal protein
dnaZx-like protein
TRH-like tripeptid
blood cell protein
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Met-enkephalin - b
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ОУ 4	Query Matc Best Local Matches	RESULT 2 F22565 R-phycoery C:Species: C:Date: 07 C:Accessio R:Klotz A J. Biol. C A:Title: C A:Reference A:Accessio A:Molecule A:Residues	Query Mat Best Loca Matches Qy 4 Y Db 2 Y	RESULT 1 A22565 R-phycoerythr C; Species: Ga C; Date: 07-Ma C; Accession: R; Klotz, A.V. J. Blol. Chem A; Title: Char A; Reference n A; Accession: A; Molecule ty A; Residues: 1		54444444 330 544444 600 600 600 600 600 600 600 600 60
YR 5	Match ocal Similarity 100.0%; Score 12; D ocal Similarity 100.0%; Pred. No. 2 Score 12; D	thrin gamma-A chain - red alga (Gastroclonium coulteri -Max-1988 #sequence_revision 07- N: F22565 N: Glazer, A.N. hem. 260, 4856-4863, 1985 hem. 260, 4856-4863, 1985 haracterization of the bilin att haracterization of the bilin att n: F22565 type: protein : 1-5 <klo></klo>	Match Local Similarity 100.0%; Pred. No. 2: es 2; Conservative 0; Mismatches 4 YR 5 II 2 YR 3	in alpha-1 chain - red algastroclonium coulteri r-1988 #sequence_revision 07 A22565 ; Glazer, A.N. . 260; 4856-4863, 1985 acterization of the bilin at umber: A22565; MUID:85182601 A22565 pe: protein	ALIGNMENTS	5 27.8 4 2 ECNK 5 27.8 4 2 ECNK 5 27.8 4 2 D41654 5 27.8 4 2 J01273 5 27.8 4 2 J01273 5 27.8 4 2 A35779 5 27.8 4 2 A25844 5 27.8 4 2 A7552 27.8 4 2 PT0721 5 27.8 4 2 PT0721 5 27.8 5 2 J40702 5 27.8 5 2 J40702 5 27.8 5 2 D60274 5 27.8 5 2 T14910 5 27.8 5 2 PT0295 5 27.8 5 2 PT0295 5 27.8 5 2 PT02513
	DB 2; Length 5; 2.2e+05; hes 0; Indels 0; Gaps 0;	Gastroclonium coulteri) (fragment) Mar-1988 #text_change 23-Mar-1993 achment sites in R-phycoerythrin.	DB 2; Length 3; 2.2e+05; hes 0; Indels 0; Gaps 0;	(Gastroclonium coulteri) (fragment) -Mar-1988 #text_change 23-Mar-1993 tachment sites in R-phycoerythrin.	TS	phagocytosis-stimu cardioexcitatory n hypothetical prote phospholipase C (E neuropeptide Antho neuropeptide Antho neuropeptide Concurrent of the concurrent

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protamine P1 - orangutan (fragment)
C;Species: Pongo pygmaeus (orangutan)
C;Date: 06-Sep-1996 #sequence_revision 06-Sep-1996 #text_change 21-Jul-2000
C;Accession: I61883
R;Querralt, R; Oliva, R
Gene 133, 197-204, 1993
A;Title: Identification of conserved potential regulatory sequences of the protamine-end A;Reference number: 137013; MUID:94040810
A;Accession: I61883
                                                                                                                  R:Queralt, R; Oliva, R. Gene 133, 197-204, 1993
A;Title: Identification of conserved potential regulatory sequences A;Reference number: I37013; MUID:94040810
A;Reference number: I37013; MUID:94040810
A;Accession: I84439
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Status: type: DNA
A;Residues: 1-4 <RES>
A;Cross-references: EMBL:Z12147; NID:938134; PIDN:CAA78131.1; PID:94
                                                                                                                                                                                                                                                                                                      protamine P1 - savannah baboon (fragment)
C;Species: Pap1o hamadryas doguera (savannah baboon)
C;Date: 19-Mar-1997 #sequence_revision 07-Nov-1997 #text_change 21-Jul-2000
C;Accession: I84439
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A;Title: Identification of conserved potential regulatory sequences A;Reference number: 137013; MUID:94040810
A;Accession: 137013
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C;Species: Cercopithecus patas
C;Species: 19-Mar-1997 #sequence_revision 07-Nov-1997 #text_change 21-Jul-2000
C;Accession: I37013
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A;Molecule type: DNA
A;Residues: 1-4 <RES>
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A;Molecule type: DNA
A;Residues: 1-4 <RES>
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                                      Score 8; DB 2;
Pred. No. 2.2e+
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Pred. No. 2.2e+
                     Mismatches
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A; Residues: 1-5 < RES>
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A; Residues: 1-5 <BRA>
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ribosomal protein S4 - Bacillus licheniformis (fragment)
C;Species: Bacillus licheniformis
C;Date: 19-Jul-1996 #sequence_revision 19-Jul-1996 #text_change 19-Jul-1996
C;Accession: 139966
R;Grundy, F.J.; Henkin, T.M.
J. Bacteriol. 174, 6763-6770, 1992
A;Title: Characterization of the Bacillus subtilis rpsD regulatory target site.
A;Reference number: 139963; MUID:93015735
A;Accession: 13966
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
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C;Species: Escherichia coli
C;Date: 11-Sep-1992 #sequence_revision 11-Sep-1992 #text_change 23-Mar-1993
C;Accession: B37325
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J. Bacteriol. 174, 6763-6770, 1992
A;Title: Characterization of the Bacillus subtilis rpsD regulatory target site.
A;Reference number: 139963; MUID:93015735
A;Recession: 139964
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C;Species: Bacillus circulans
C;Becies: 19-7ul-1996 #sequence_revision 19-Jul-1996 #text_change 19-Jul-1996
C;Accession: I39964.
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J. Bacteriol. 173, 1789-1800, 1991
A;Title: Evidence for a methylation-blocking factor (mbf) locus involved in
A;Reference number: A37325; MUID:91154136
A;Accession: B37325
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C;Genetics:
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Pred. No. 2.2e+05
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Pred. No. 2.2e+
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Copyright (c) 1993 - 2000 Comp
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US-08-482-528-127

US-08-448-528-127

US-08-444-818-566

US-08-444-818-566

US-08-444-818-566

US-08-75-736D-19

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US-09-026-904-7	US-08-913-441B-14	US-08-913-441B-11	US-08-471-068-163	US-08-471-068-162	US-08-189-331-163	US-08-189-331-162	US-08-403-634-14	US-08-403-634-11	US-08-014-426-37	US-08-014-426-36	US-08-014-426-28	US-08-014-426-21	US-08-230-473-2	PCT-US95-13041-19	US-08-488-659A-17	US-08-317-310A-19	US-08-209-261B-6	US-08-487-006-17	US-09-343-623-11	US-09-151-011-11	US-08-486-839-11	us-09-107-755-2
Sequence 7, Appli		Sequence 11, Appl	Sequence 163, App	•		Sequence 162, App		`	Sequence 37, Appl	Sequence 36, Appl	Sequence 28, Appl	Sequence 21, Appl	Sequence 2, Appli	Sequence 19, Appl	Sequence 17, Appl	Sequence 19, Appl	Sequence 6, Appli	Sequence 17, Appl	Sequence 11, Appl	Sequence 11, Appl	Sequence 11, Appl	Sequence 2, Appli

US-08-486-839-12

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; HYPOTHETICAL: US-08-486-839-12
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                                                                                                                                                                                                APPLICATION NUMBER: US/08/486
FILING DATE: 07 June 1999
ATTORNEY_AGENT INFORMATION:
NAME: BAZON, RONALD J.
REGISTRATION NUMBER: 29,281
REFERENCE_DOCKET NUMBER: 294
TELECOMMUNICATION INFORMATION:
                              LENGTH: 11 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLCCY: unknown
MOLECULE TYPE: protein
                                                                                                                                              TELEFAX: (516) 822-35
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                                                                                                                                                                                 SOFTWARE:
CURRENT APPLICATION DATA:
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                                                                                                                           SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
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STREET: 350 Je
CITY: Jericho
STATE: New Yorl
                                                                                                                                                                                 TELEPHONE:
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ZIP: 11758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New York
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350 Jericho Turnpike
                                                                                                                                                                 (516)
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           . protein
                                                                                                                                                                                 (516) 822-3550
                                                                                                                                                                 822-3582
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Query Match

44.48;

Score 28;

DB 2;

Length

11;

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US-09-343-623-12
; Sequence 12, Application US/09343623
; Patent No. 6303118
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US-09-151-011-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: MOTIES, Robert C.
REGISTRATION NUMBER: 42,910
REFERENCE/DOCKET NUMBER: 294-3
TELECOMMUNICATION INFORMATION:
TELEPHONE: (516) 822-3580
TELEPAX: (516) 822-3582
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 11 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOTOTOTO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Overy Match 44.4%; Score 28; DB 3; Length 11; Best Local Similarity 66.7%; Pred. No. 32; Matches 4; Conservative 1; Mismatches 1; Indels
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: TBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
SOFTWARE:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/151,011
FILING DATE: 10 - September - 1998
ATTORNEY/AGENT INFORMATION:
NEWER - BENEAT - PROPERTY - PROPERTY APPLICATION TO SEPTEMBER: US/09/151,011
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                  APPLICANT:
TITLE OF INVENTION: A human chitinase, its recombinant
TITLE OF INVENTION: production, its use for decomposing chitin, its use
TITLE OF INVENTION: in therapy or prophylaxis against infection diseases.
NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
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TITLE OF INVENTION: Production, Its Use For Decomposing Chitin, Its Use in
TITLE OF INVENTION: Therapy or Prophylaxis Against Infection Diseases.
NUMBER OF SEQUENCES: 16
CORRESPONDENCE ADDRESS:
       ADDRESSEE: Hoffmann & Baron
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CITY: Syosset
STATE: New York
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6900 Jericho Turnpike
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TOPOLOGY: unknown
MOLECULE TYPE: protein
HYPOTHETICAL: NO
US-09-343-623-12
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PRIOR APPLICATION DATA:

PRIOR APPLICATION NUMBER: US/08/486,839

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Best Local Similarity 66.7
Matches 4; Conservative
                                                                                                            COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Renschler, Markus F.
APPLICANT: Levy, Ronald
APPLICANT: Bhatt, Ramesh
APPLICANT: Dower, William
TITLE OF INVENTION: RECEPTOR-BINDING ANTIPROLIFERATIVE
TITLE OF INVENTION: PEPFIDES
                                                                                                                                                                                                                                               ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 65
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend Khourie and Crew
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 11 amino acids
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MEDIUM TYPE: Floppy
                     APPLICATION NUMBER:
FILING DATE: 05-FEB
CLASSIFICATION: 435
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                                                                                                                                                                                                                                                                                                                                                    COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPUTEN: COMPUTER: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
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ZIP: 11758
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CITY: Jericho
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                                    05-FEB-1993
N: 435
                                                                                                                                                                                                                                                      Floppy disk
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                                                                                      US/08/014,426
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Maximum Match
Listing first
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Perfect score:
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Match Length
SPTREMBL_17:*
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Gapop 10.0 , Gapext 0.5
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sp_bacteria:*
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sp_rodent:*
sp_virus:*
sp_vertebrate:*
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62.437 Million cell updates/sec
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                                                   Q85723 simian sarc
Q85723 simian sarc
Q94c36 homo sapien
Q71893 oreochromis
Q9td02 terranatos
Q9r9c2 borrella bu
Q16386 homo sapien
Q9uk44 homo sapien
Q9uk44 homo sapien
Q9uyf9 homo sapien
Q15342 homo sapien
Q15342 homo sapien
Q15342 homo sapien
Q15343 homo sapien
Q15343 jomo sapien
Q15343 tomo sapien
Q15343 jomo sapien
Q15344 jomo sapien
                    P82003 bombyx mori
Q9uj48 homo sapien
Q26093 pisaster oc
                                                                                                                                                                                                   Q9uma0 homo sapien
                                                                                                                                                                                                                         Description
       29uj48 homo sapien
226093 pisaster oc
288082 chimpanzee
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Matches 4
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Q9UMA0;
01-MAY-2000
01-MAY-2000
01-MAY-2000
                                                                                                                                                                                               SEQUENCE FROM N.A.

MEDIJINE-94061059; PubMed-7694728;

Spritz R.A., Holmes S.A., Berg S.Z., Nordlund J.J., Fukai K.;

Spritz R.A.; Holmes S.A., Berg S.Z., Nordlund J.J., Fukai K.;

"A recurrent deletion in the KIT (mast/stem cell growth factor receptor) proto-oncogene is a frequent cause of human piebaldism.";

Hum. Mol. Genet. 2:1499-1500(1993).
 Q85723
                                                                                                                                                                  SEQUENCE
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                                                                                                                                                                                                                                                                                 NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                      KIT.
Homo sapiens (Human).
Metazoa; Chordata;
                                                                                                                                                                                                                                                                                                                                              KIT PROTEIN
                                                                                                       Local Similarity 66. 
nes 4; Conservative
                                                                         5 TWYRES 10
                                                           4 TWKREN 9
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                                                                                                                                                                  9 AA;
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O (TrEMBLrel. )
O (TrEMBLrel. )
N (FRAGMENT).
 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                   1182 MW;
                                                                                                                   39.7%;
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13,
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                                                                                                       Score 25; DB 4; Length 9; Pred. No. 4.7e+05; 1; Mismatches 1; Indels
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Last annotation updat
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 PRT;
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      O77893 PRELIMINARY; PRT; 11 AA.

O77893;
O1-NOV-1998 (TYEMBLE1. 08, Created)
O1-NOV-1998 (TYEMBLE1. 08, Last sequence update)
O1-NOV-1998 (TYEMBLE1. 08, Last annotation update)
MHC CLASS II B LOCUS 10 (FRACKENT)
OTEOCHOOMIS niloticus (Nile tilapia) (Tilapia nilotica).
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
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Q1-NOV-1996
Q1-NOV-1996
Q1-NOV-1998
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Q9UC36;
Q1-MAY-2000 (TrEMBLrel. 13, Created)
Q1-MAY-2000 (TrEMBLrel. 13, Last sequence update)
Q1-MAY-2000 (TrEMBLrel. 13, Last annotation update)
RDA HEAT SHOCK PROTEIN HOMOLOG FRAGMENT 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE-92218434; PubMed=1560006; MEDLINE-92218434; PubMed=1560006; Thoguma Y., Morishita R., Asano T.; "Copurification of small heat shock protein with alpha B crystallin "Copurification of small heat shock protein with alpha B crystallin from human skeletal muscle."; J. Biol. Chem. 267.7718-7725(1992). SEQUENCE 9 AA; 1220 MW; 26933415B1F77B43 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Euteria; Primates; Catarrhini; Hominidae; Homo.
Cichlidae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sinian sarcoma virus.
Viruses; Retroviridae; Gammaretrovirus NCBI_TaxID=1181;
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2 WYPHSR 7
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K01473; AAA46816.1; -.
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   Oreochromis
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5 (TrEMBLrel. )
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Last annotation update)
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Pred. No.
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Pred. No.
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RESULT
Q9R9C2
ID Q9
AC Q9
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DT 01
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DT 01
CS BC
OG P1
OC BC
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Q9TD02
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Best Local :
                  01-MAY-2000 (TTEMBLEEL. 13, Created)
01-MAY-2000 (TTEMBLEEL. 13, Last sequence update)
01-MAY-2000 (TTEMBLEEL 13, Last annotation update)
PLASMID CP32-3, POSSIBLE PARTITION PROTEINS, COMPLETE CDS
BOYZELIA burgdorferi (Lyme disease spirotete).
Plasmid cp32-3.
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01-MAY-2000 (TREMBLIEL 13, Last sequence update)
01-MAY-2000 (TREMBLIEL 13, Last annotation update)
01-MAY-2000 (TREMBLIEL 13, Last annotation update)
CYTOCHROME C OXIDASE SUBUNIT I (FRAGMENT).
Terranatos dolichopterus.
Mitochondrion.
Bukaryota: Metazoa; Chordata: Craniata; Vertebrata; Euteleostomi;
Bukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha;
Cyprinodontiformes; Aplocheilidae; Rivulinae; Terranatos.
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Genetics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (Atherinomorpha, Cyprinodontiformes): A molecular phylogenetic and biogeographic perspective."; Evolution 53:1200-1216(1999). EMBL; AP092421; AAF03041.1; ".
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                                                                                                                                                                                    Q9R9C2;
                                                                                                                                                                                                                   Q9R9C2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mitochondrion.
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[1]
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3; Conservative
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)50003; AAC41342.1; -
Spirochaetales; Spirochaetaceae; Borrelia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8 AA; 1084 MW; F0C9D3640DD44056 CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                PRELIMINARY;
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75.08;
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Pred. No. 4
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Pred. No. 2.5e+03;
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Perfect score:
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   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Gapop 10.0 , Gapext 0.
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Copyright (c) 1993 - 2000 Compugen Ltd
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   RL16_ACHLA
URE3_MORMO
UXA6_CHITIR
LCR3_LEUMA
ACL_THUAL
PLP_BRANA
BPP2_BOTJM
GON3_PETJM
GON3_PETJM
TOP1_SALTY
LPW_THETH
TKN2_UPERU
LOKI_LOCMI
IGAO_DACDE
WWA1_ACHPU
WWA2_ACHPU
WWA1_ACHPU
AKH_LIBAU
LCK1_LEUMA
LCK4_LEUMA
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UPA9_HUMAN
GON2_CHICK
UPAA_HUMAN
HUTU_KLEAE
LMIP_LOCMI
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P29221 acholeplasm P1939 morganella p38007 chlamydia t P21142 leucophaea p18691 thunnus alb p81707 brassica na p01022 bothrops ja p30948 petromyzon p13270 jatropha mu p40686 salmonella p05624 thermus aqu p08616 uperolela r p41491 locusta mig p06294 dactylium d p35919 achatina fu p25418 libellula a p21140 leucophaea p21141 leucophaea p19988 leucophaea p19988 leucophaea
                                                                                                                                                                                             P38495
P12481
P04378
P21996
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P30095
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5 homo sapien
3 gallus gall
6 homo sapien
1 klebsiella
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RESULT 2 UPA9_HUMAN ID UPA9_HUMAN STANDARD: PRT; 10 AA. AC P30095; DT 01-APR-1993 (Rel. 25, Created) DT 01-APR-1993 (Rel. 25, Last sequence update) DT 20-AUG-2001 (Rel. 40, Last annotation update) DE UNKNOWN PROTEIN FROM 2D-PAGE OF PLASMA (SPOT 35) (FRAGMENT). OS Homo Sapiens (Human). OC Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	NON_TER 10 10 SEQUENCE 10 AA; 1306 MW; 00C0A6DB43772694 CRC64; SEQUENCE 10 AA; 1306 MW	gy 141:3087-3093(1995). CON: AMINOPEPTIDASE WHICH HYDROLYZES SUBSTRATES WITH FRALAL MAINO ACID RESIDUES BUT NOT N-TERMINAL BLICKED ONES MAL AMINO ACID RESIDUES BUT NOT N-TERMINAL BLICKED ONE IMPORTANT IN MACTIVITY IS MEASURED AT PH 7.5. MAY BE IMPORTANT IN TON AND PATHOGENESIS OF THE ORGANISM IN THE HUMAN ORALS. FOR: REQUIRES MAGNESIUM OR CALCIUM. Aminopeptidase; Magnesium; Calcium.	TREE	01-OCT-1996 (Rel. 34, Created) 01-OCT-1996 (Rel. 34, Last sequence update) 01-OCT-1996 (Rel. 34, Last annotation update) AMINOPEPTIDASE (EC 3.4.11) (FRAGMENT). Capnocytophaga gingivalis. Bacteria, CEB group; Flavobacteria; Flavobacteriaceae; NCBI_TaxID=1017;	ALIGNMENTS RESULT 1 APE_CAPGI STANDARD; PRT; 10 AA.	34 12 19.0 8 1 LCK8_LEUMA P19990 leuco 35 12 19.0 9 1 UHAZ_HUMAN P40929 homo 36 12 19.0 10 1 AKHX_LOCMI P81626 locus 37 12 19.0 10 1 COXO_RAT P80432 rattu 38 12 19.0 10 1 HTF1_ROMMI P18110 romal 39 12 19.0 10 1 SYK_CAMUP P55962 nicot 40 12 19.0 10 1 SYK_CAMUP P40751 urech 41 12 19.0 10 1 TKU1_UREUN P22790 achat 42 12 19.0 11 1 CEPL_ACHFU P31933 homo 43 12 19.0 11 ULAG_HUMAN P30425 bothn 44 11 17.5 5 1 BPP7_BOTIN P30435 mus n 45 11 17.5 8 1 AKH_GARYBI P14086 gryll 47 11 17.5 8 1 AKH_TABAT 50 11 17.5 8 1 ALL5_CALVO P41841 calli
ostomi;	0; Gaps 0;	7 10 7	ulence	Capnocytophaga.		100000000000000000000000000000000000000

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matsuo H.;
"Identification of the second gonadotropin-releasing hormone in chicken hypothalamus: evidence that gonadotropin secretion is probably controlled by two distinct gonadotropin-releasing hormones in avian species.";
Proc. Natl. Acad. Sci. U.S.A. 81:3874-3878(1984).
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Gallus gallus (Chicken),
Alligator mississippiensis (American alligator),
Squalus acanthias (Spiny dogfish),
Hydrolagus colliei (Spotted ratfish) (Pacific ratfish), and
Clupea pallasii (Pacific herring).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GON2_CHICK STANDARD; PRT; 10 AA.

P37043; P20408; P81750;

01-FEB-1991 (Rel. 17, Created)
01-FEB-1991 (Rel. 17, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
20-AUG-2001 (Rel. 41, GONADOTROPIN-RELEASING HORMONE II) (GNRH-II)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE:
SPECIES-Chicken; TISSUE-Hypothalamus;
MEDLINE-84222059; PubMed-6427779;
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Hughes G.J., Frutiger S., Paquet N., Ravier F., Pa
Sanchez J.-C., James R., Tissot J.-D., Bjellqvist
Hochstrasser D.F.;
Lovejoy D.A., Fischer W.H., Ngamvongchon S., Craig A.G., Nahorniak C.S., Peter R.E., Rivier J.E., Sherwood N.M.; "Distinct sequence of gonadotropin-releasing hormone (GRRH) dogfish brain provides insight into GRRH evolution.";
                                                                                                                SPECIES=S.acanthias; TISSUE=Brain; MEDLINE=92335300; PubMed=1631133;
                                                                                                                                                                                                                                Lovejoy D.A., Fischer W.H., Parker D.B., McRory J.E., Park M., Lance V., Swanson P., Rivier J.E., Sherwood N.M.; "Primary structure of two forms of gonadotropin-releasing hormone from brains of the American alligator (Alligator mississippiensis)."; Regul. Pept. 33:105-116(1991).
                                                                                                                                                                                                                                                                                                                                                                           SPECIES-A.mississippiensis; TISSUE-Brain; MEDLINE-91352338; PubMed-1882082;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Miyamoto K., Hasegawa Y., Nomura M., Igarashi M., Kangawa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=9031, 8496, 7797, 7873, 30724;
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                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE.
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Pred. No.
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PIR, B60066; RHAQ2.
PIR, A61126, A61126.
PIR; B46030; B46030.
PIR; B46030; B46031.
Pfam; PF0032012; GDRH.
Pfam; PF00446; GDRH; 1.
PROSITE; PS00473; GNRH; 1.
NON_TER
SEQUENCE
                                                                                                                                                                                                                                              P30096;
01-APR-1993 (Rel. 25, Created)
01-APR-1993 (Rel. 25, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
UNKNOWN PROTEIN FROM 2D-PAGE OF PLASMA (SPOT 36) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Plasma protein map: an update by microsequencing."; Electrophoresis 13:707-714(1992).
-i- miscellaneous: on The 2D-GEL THE DETERMINED PI OF THIS UNKNOWN PROTEIN IS: 7, ITS MW IS: 12 KDA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of a holocephalan (ratfish: Hydrolagus colliei).";
Gen. Comp. Endocrinol. 82:152-161(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lovejoy D.A., Sherwood N.M., Fischer W.H., Jackson B.C., Rivier J.E. Lee T.;
                                                                                                                   Hughes G.J., Frutiger S., Paquet N., Ravier F., Pasquali C., Sanchez J.-C., James R., Tissot J.-D., Bjellqvist B., Hochstrasser D.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SPECIES-C.pallasii; TISSUE-Brain, and Pituitary; MEDLINE-20114351; PubMed-10650929;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SPECIES=H.colliei; TISSUE=Brain; MEDLINE=91340067; PubMed=1678723;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Proc. Natl. Acad. Sci. U.S.A. 89:6373-6377(1992).
[4]
                                                           SWISS-2DPAGE; P30096; HUMAN.
                                                                                                                                                       MEDLINE-93092937; PubMed=1459097;
                                                                                                                                                                   TISSUE-Plasma;
                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                              UPAA_HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
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                                   VARIANT
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                                                                                                                                                                                                                                        Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Primary structure of gonadotropin-releasing hormone from the brain
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10 AA; 1254 MW;
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  909 MW;
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  86677B59D1A72042 CRC64;
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284B2E437871F5A3 CRC64;
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 BLOSUM62
Gapop 10.0 , Gapext 0.5
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A33571
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42.686 Million cell updates/sec
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                                                                 gonadoliberin - sp
gonadoliberin II
Ig heavy chain CRD
Ig heavy chain CRD
Ig heavy chain CRD
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               hutU protein - Kle
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sperm-activating p
sperm-activating p
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Ig heavy chai
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light-harvesting p
dermorphin (Trp-4,
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follistatin -
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50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	ω	32	31	30
15	15	15	15	15	15	15	15	15	15	15	15	15	15	15.5	16	16	16	16	16	16
23.8	23.8	23.8	23.8		23.8		23.8			23.8	23.8			24.6	25.4	25.4	25.4	25.4	25.4	25.4
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T14019	T13838	PH0923	PT0289	в39308	A60589	G60589	PC2172	A47593	RHLMGS	S55696	PX0008	A60803	F22565	T13976	A49037	A29806	JQ2317	JQ2307	C53652	D60588
cytochrome-c oxida	cytochrome-c oxida	T-cell receptor be	Ig heavy chain CRD	glycine reductase	sperm-activating p	sperm-activating p	triacylglycerol li	mercury resistance	gonadoliberin – se	phosphoenolpyruvat	glucuronosyltransf	neuropeptide – sea	R-phycoerythrin ga	cytochrome-c oxida	TcR gamma V-J regi	acidic proline-ric	hypothetical 1.5K	hypothetical 1.5K	rhlR protein - Pse	sperm-activating p

R:Kim, C.H.; Choi, H.I.; Lee, D.S. Biosci. Biotechnol. Biochem. 57, 1632-1637, 1993 A;Title: Purification and biochemical properties of an alkaline pullulanase from alka A;Reference number: PN0649; MUID:94080025 A;Recession: PN0649

A;Molecule type: protein
A;Residues: 1-7 <KIN>
C;Comment: This enzyme is used togther with glucoamylase to improve ntent in high maltose syrups.

the efficiency

of

C; Keywords: glycosidase; hydrolase; polysaccharide degradation

alpha-dextrin endo-1,6-alpha-glucosidase (EC 3.2.1.41) - Bacillus sp. (strain c;Speciles: Bacillus sp. (strain c;Speciles: Bacillus sp. C;Date: 19-May-1994 #sequence_revision 19-May-1994 #text_change 07-May-1999 C;Accession: PN0649

S-1)

RESULT PN0649

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C;Accession: A.J.J., R. R;Gospodarowicz, D.; Lau, K. R;Gospodarowicz, D.; Lau, K. R;Gospodarowicz, D.; Lau, K. Biophys. Res. Commun. 165, 292–298, 1989
Biochem. Biophys. Res. Commun. 165, 292–298, 1989
A;Title: Pituitary follicular cells secrete both vascular endothelial growth factor a A;Title: Pituitary follicular cells secrete both vascular endothelial growth factor a A;Title: Pituitary follicular cells secrete both vascular endothelial growth factor a A;Title: Pituitary follicular cells secrete both vascular endothelial growth factor a
                                                                                                                                                                                                                                                                                    RESULT 2
A33571
follistatin - bovine (fragment)
folspecies: Bos primigenius taurus (cattle)
C;Species: Bos primigenius taurus (cattle)
C;Date: 09-Mar-1990 #sequence_revision 09-Mar-1990 #text_change 30-Sep-1993
C;Accession: A33571
                                                                                                             A;Status: preliminary
A;Molecule type: proto
A;Residues: 1-11 <GOS:
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Best Local Similarity 33.3
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Best Local Similarity
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2; Mismatches
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Pred. No. 2.2e+05;
4; Mismatches (
DB 2; L-... 4.6e+02;
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         Gaps
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C:Accession: C54226
R:Kerfeld, C.A.; Yeates, T.O.; Thornber, J.P.
Biochemistry 33, 2178-2184, 1994
A:Title: Purification and characterization of the peripheral antenna of the purple-sulfu A:Reference number: A54226; MUID:94162224
A:Accession: C544226
A:Accession: C54226;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                light-harvesting protein B-830 alpha-3 chain - Chromatium purpuratum (fragment) c;Species: Chromatium purpuratum c;Species: Chromatium purpuratum c;Capace: 05-Jan-1996 #sequence_revision 05-Jan-1996 #text_change 05-Jan-1996 C;Accession: C54226
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A;Title: Functionally distinct subsets of human gamma/delta T cells.
A;Reference number: A49033; MUID:92083926
A;Accession: F49033
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C;Species: Homo sapiens (man)
C;Date: 19-Dec-1993 #sequence_revision 17-Mar-2000 #text_change 17-Mar-2000
C;Accession: F49033
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;Residues: 1-10 <MOR>
;Coss-references: GB:$72605; NID:9240700; PIDN:AAB20632.1; PID:9240701
A;Note: sequence extracted from NCBI backbone (NCBIN:72605, NCBIP:72606)
C;Keywords: T-cell receptor
                                          A;Reference number: S21152; MUID:92339502
A;Accession: S21230
A;Status: preliminary
                                                                                                                                                                                           dermorphin (Trp-4, Asn-7) [validated] - two-colored leaf frog (fragment)
C;Species: Phyllomedusa bicclor (two-colored leaf frog)
C;bate: 19-war-1997 #sequence_revision 10-Oct-1997 #text_change 18-Aug-2000
C;Accession: S21230
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A;Molecule type: protein
A;Residues: 1-10 <KER>
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A; Molecule type: protein A; Residues: 1-7 < MIG>
                                                                                                                 R.Mignogna, G.; Severini, C.; Simmaco, M.; Negri, L.; Falconieri Erspamer, G.; Kreil, G.
FEBS Lett. 302, 151-154, 1992
A;Title: Identification and characterization of two dermorphins from skin extracts of th
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                                                                                                                                     Severini, C.; Simmaco, M.; Negri, L.; Falconieri Erspamer, G.; Kreil, G. 151-154, 1992
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Pred. No.
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R;James, M.O.; Boyle, S.M.; Trapido-Rosenthal, H.G.; Smith, W.C.; Greenberg, R.M.; Sh. Arch. Biochem. Biophys. 329, 31-38, 1996
A;Title: CDNA and protein sequence of a major form of P450, CYP2L, in the hepatopancr A;Reference number: 568856; MUID:96201120
A;Accession: S78426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C;Comment: Calsequestrin is a high-capacity and moderate-affinity calcium binding pro C;Comment: Calsequestrin acts as a calcium buffer, and the release of calcium bound to C;Comment: The fast skeletal muscle isoform of calsequestrin can be phosphorylated in C;Superfamily: Calsequestrin C;Superfamily: Calcium binding; cardiac muscle; glycoprotein; heart; phosphoprotein; ske
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                52.5K protein - spiny lobster (fragment)
c;Species: Panulirus argus (spiny lobster)
c;Date: 14-Apr-1998 #sequence_revision 24-Apr-1998 #text_change 19-May-2000
C;Accession: S78426
gonadoliberin II - American alligator
N;Alternate names: gonadotropin-releasing hormone II
C;Species: Alligator mississippiensis (American alligator)
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A; Residues: 1-9 < JAM>
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Pred. No. 2.2e+05;
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Result
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Maximum Match 100%
Listing first 50 summaries
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Perfect score:
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           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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        of hits satisfying chosen parameters:
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Match
     \begin{array}{c} 662 \\ 572 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\ 683 \\
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/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/BCTUS_COMB.pep:*
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US-08-335-198-12

US-08-968-676-22

US-09-258-754-271

US-09-042-107-271

US-08-789-33F-77

US-08-519-103-4

US-08-519-103-4

US-08-177-109A-8

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US-08-687-706-38
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US-09-042-107-22

US-08-105-416-36

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US-09-020-880-78

US-08-437-116A-11

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US-08-530-792D-11

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US-09-020-880-77

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US-08-968-676-24
US-08-727-045A-1
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                                                 e 22, Apple 236, Apple 236, Apple 211, Apple 217, Apple 27, Apple 217, Apple 
  38, 1
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15	15	15	1	15	15	15	15	15	15	16	16	16	16	16	16	16	16	16	16	16	16	16
42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	42.9	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7
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4 US-09-432-335-7	4 US-09-203-623-22	4 US-09-020-880-80		3 US-08-649-100-19		2 US-08-504-265B-47	1 US-08-398-028B-47	1 US-08-460-343B-47		5 PCT-US91-07506-84	4 US-09-315-444-105	4 US-09-475-316A-43	4 US-09-226-012-111	4 US-09-226-012-109			1 US-08-290-301-81	US	1 US-08-264-093-25	1 US-08-401-512-76	1 US-08-401-512-74	4 US-09-018-635-4
Sequence 7, Appli	Sequence 22, Appl	Sequence 80, Appl	Sequence 35, Appl	Sequence 19, Appl	Sequence 7, Appli	Sequence 47, Appl	Sequence 47, Appl	Sequence 47, Appl	•	84,	Sequence 105, App	Sequence 43, Appl	•	ς.	Sequence 60, Appl	Sequence 105, App	Sequence 81, Appl	-	Sequence 25, Appl	Sequence 76, Appl	Sequence 74, Appl	Sequence 4, Appli

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: Sequence 22, Application US/09042107 ; Patent No. 6232287 ; GENERAL INFORMATION:
                                                                                                                                                                               RESULT 2
US-09-042-107-22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: Description of Artificial Sequence: Synthetic US-09-258-754-22
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US-09-258-754-22
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Patent No. 6174687
GENERAL INFORMATION:
APPLICANT: RuoSlahti, Erki
APPLICANT: Pasqualini, Renata
APPLICANT: Patient Membrane Dipeptidase
FITLE OF INVENTION: Membrane Dipeptidase
FITE REFERENCE: P-LJ 3443
CURRENT APPLICATION NUMBER: US/09/258,754
CURRENT FILING DATE: 1998-02-26
EARLIER APPLICATION NUMBER: US/09/42,107
EARLIER FILING DATE: 1998-03-13
NUMBER OF SEQ ID NOS: 452
FORTHANDER: Datantin Vor 2 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 22
                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                      Matches
                 APPLICANT: Ruoslahti, Erkki
APPLICANT: Pasqualini, Renata
TITLE OF INVENTION: Molecules
TITLE OF INVENTION: Tissues
FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
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2 SFLEYR 7
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66.7%;
                                          that Home to Various Selected Organs
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Pred. No. 1.6e+05;
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                                          or
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; TYPE: amino acid
STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-105-416-36
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CURRENT FILING DATE: 1998-03-13
KNUMBER OF SEQ ID NOS: 436
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 2
LENGTH: 7
TYPE: PRT
CORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-042-107-22
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US-08-105-416-36
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GENERAL INNORMATION:
GAPPLICANT: GOOGENOW, Robert S
APPLICANT: GOOGENOW, Robert S
APPLICANT: GOOGENOW, ROBERT S
APPLICANT: GOOGENOW, ROBERT S
APPLICANT: GOOGENOW, ROBERT S
TITLE OF INVENTION: Class I MHC Modulation of Surface
TITLE OF INVENTION: Receptor Activity

CORRESPONDENCE ADDRESS:
ADDRESSEE: Plarh, Hobbach, Test, Albritton & Herbert
STREET: Four Embarcadero Center, Suite 3400

STATE: CA
COUNTRY: US
STATE: CA
COUNTRY: US
SIPPE: CAPICATION ROBERS: ROBERT S
COMPUTER READABLE FORM:
MEDIUM TYPE: Florpy disk
COMPUTER READABLE FORM:
MEDIUM TYPE: Florpy disk
COMPUTER READABLE FORM:
MEDIUM TYPE: Florpy disk
COMPUTER IBM PC COMPATION:
MEDIUM TYPE: Flory PC -DOS/MS-DOS
SOFTMARE: PRESENTION DATA:
APPLICATION NUMBER: US/08/105,416
FILING DATE: 12-AUG-193
CLASSIFICATION: 435
ATTORNEY/AGRAT INFORMATION:
REGISTRATION UNUMBER: 20015
REFERENCE/DOCKET NUMBER: A55115-4/BIR
TELEPAX: 415-781-1989
INFORMATION FOR SEO ID NO. 36.
                                                                                     Query Match 57.3
Best Local Similarity 80.0
Matches 4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 36, Application US/08105416
Patent No. 5639958
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 62.9%;
Best Local Similarity 66.7%;
Matches 4; Conservative
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INFORMATION FOR SEQ ID NO: 36:
SEQUENCE CHARACTERISTICS:
LENGTH: 7 amino acids
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3 TLLRY 7
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                                                                                                          57.1%;
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                                                                                     Score 20; DB 1; Le
Pred. No. 1.6e+05;
0; Mismatches 1;
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RESULT 4
US-08-473-656A-36
US-08-473-656A Application US/08473656A
Sequence 36, Application US/08473656A
Retent No. 5883999
GENERAL INFORMATION:
APPLICANT: Glosenow, Robert S
APPLICANT: Goodenow, Robert S
APPLICANT: Goldstein, Avanam
TITLE OF INVENTION: Class I MHC Modulation of Surface
TITLE OF INVENTION: Receptor Activity
NUMBER OF SEQUENCES: 40
CORRESPONDENCE ADDRESS: 40
CORRESPONDENCE ADDRESS: 40
US-09-020-880-78
US-09-020-880-78
Sequence 78, Application US/09020880A
Patent No. 6136558
GENERAL IMFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Jones, Jennifer T.
APPLICANT: Jones, Jennifer T.
APPLICANT: Salimbrother, Wayne J.
APPLICANT: Silmbrother, Wayne J.
APPLICANT: Wells, James M.
APPLICANT: Wells, James M.
APPLICANT: Hells, James M.
APPLICANT: Hells, 130es M.
ETILE REFERENCE: 14918-720CON1
CURRENT APPLICATION UNMERS: US/09/020,880A
CURRENT FILING DATE: 1998-02-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; LENCTH: 7 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-473-656A-36
                                                                                                                                                                                                                                                                                                                       RESULT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: ROWLAND, Bettram I.
REGISTRATION NUMBER: 20015
REFERENCE/DOCKET NUMBER: A551
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-781-1989
INFORMATION FOR EGO ID NO: 36:
SEQUIENCE CHARACTERISTICS:
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Best Local S
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/
FILING DATE: 12-AUG-1993
ATTORNEY/AGENT INFORMATION:
NAME: Rowland, Bertram I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSE: Flerh, Hohbach, Test, Albritton & Herbert STREET: Four Embarcadero Center, Suite 3400 CITY: San Francisco STATE: CA COUNTPY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STATE: COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                 1 TLLEY 5
||| |
3 TLLRY 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94111
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                  MEDIINE-88078100; pubMed-2825819; Rasschaert D., Gelfi J., Laude H.; "Enteric coronavirus TGEV: partial sorganization and expression."; Biochimie 69:591-600(1987).
EMBL; AJ011482; CAA09625:1; -.. SEQUENCE 7 AA; 927 MW; 69D6D72731
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Viruses; ssRNA positive-strand viruses, no DNA stage; Nidovirales;
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P92401 lophopyrum
Q9yve3 human adeno
Q9yig1 human adeno
Q9yig1 human adeno
P82065 litoria rub
P82101 litoria rub
Q08433 rattus norv
P82070 litoria rub
P82100 litoria rub
P82100 litoria rub
P82101 nitoria rub
P821070 litoria rub
P821070 litoria rub
P82045 nicotiana t
Q66113 cherry leaf
Q99907 hordeum vul
P82073 litoria rub
P82181 spinacia ol
P82181 spinacia ol
P82181 spinacia ol
P82541 spinacia ol
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P92427
P92430
P92442
P92442
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Best Local 9
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Matches 1; Conserv
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Best Local
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Tyler M.J., Wabintz P.A., Waugh R.J., Bowle J.H., Gao C.,

Tyler M.J., Wallace J.C.;

Tyler M.J., Wallace J.C.;

"The structure of new peptides from the Australin red tree frog

"Intoria rubella'. the skin peptide profile as a probe for the study

of evolutionary trends of amphibians.";

Aust. J. Chem. 49:955-963(1996).

1- FUNCTION: CARENIDINS SHOW NEITHER NEUROPEPTIDE ACTIVITY NOR

ANTIBIOTIC ACTIVITY.

1- TISSUE SPECTRICITY: SECRETED BY THE SKIN DORSAL GLANDS.

1- MASS SPECTROMETRY: MM-626; METHOD-FAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRECIMINARY; PRT; 5 AA.

P82072;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
RUBELLIDIN 3.1.
Litoria rubella (Desert tree frog).
Eukaryota; Metazoa, Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P82071 PRELIMINARY; PRT; 5 AA.
P82071;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
SEQUENCE, AND MASS SPECTROMETRY.
TISSUE-SKIN SECRETION;
Steinborner S.T., Wabnitz P.A., Waugh R.J., Bowie J.H., Gao C.,
Tyler M.J., Wallace J.C.;
The structure of new peptides from the Australin red tree frog
'Litoria rubella'. the skin peptide profile as a probe for the study
of cyolutionary trends of amphibians.";
Aust. J. Chem. 49:955-963(1996).
-i- FUNCTION: CARTITINS SHOW NEITHER NEUROPEPTIDE ACTIVITY NOR
ANTIBIOTIC ACTIVITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Amphibian skin.
SEQUENCE 5 AA; 626 MW;
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Litoria rubella (Desert tree frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
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                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=104895;
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Pred. No. 4.7e+05;
2; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 10; DB 13; Length 5;
Pred. No. 4.7e+05;
2; Mismatches 0; Indels
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Best Local :
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Q54248;
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-!- MASS SPECIFICITY: MW-655; METHOD=FAB.
Amphibian skin; Amidation.
MOD_RES
5
SEQUENCE 5 AA; 656 MW; 71A9C9CB10300000 CRC64;
                                                                                                                                                                                                                                                                                                                                             Q08720;
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01-NOV-1996 (TREMBLrel. 01, Last sequence update)
01-NOV-1996 (TREMBLrel. 01, Last annotation update)
SECY & ADK GENES (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Streptomyces griseus.
Bacteria; Firmicutes; Actinobacteria; Actinobacteridae;
SEQUENCE
                NON_TER
                                              Waeber G., Habener J.F.;
"Novel testis germ cell specific transcript of the CREB gene contains an alternatively spliced exon with multiple in-frame stop codons."; Endocrinology 131:2010-2015(1992).
EMBL; X68994; CAA48780.1; -.
                                                                                                                                                                                                                        Homo sapiens (Human)
Eukaryota; Metazoa; (
                                                                                                                                                                                                                                                                        01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-NOV-1996 (TrEMBLrel. 08, Last annotation update)
Y PROTEIN (FRAGMENT).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Poehling S., Piepersberg W., Wehmeier U.F.;
Submitted (FBB-199) to the EMBL/GenBank/DDBJ databases
EMBL; X55915; CAA65160.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-N2-3-11;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=1911;
                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Actinomycetales; Streptomycineae; Streptomycetaceae; Streptomyces.
                                                                                                                                    MEDLINE=93010691; PubMed=1396344;
                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                    NCBI_TaxID=9606;
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6 AA;
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695 MW;
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33.3%;
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67272EB9C735D000 CRC64;
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Pred. No.
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Pred. No.
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Maximum Match 100%
Listing first 50 summaries
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Perfect score:
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aximum DB seq length: 7
       332109876543
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Query
Match
  BLOSUM62
Gapop 10.0 , Gapext 0.5
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35
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GFRP_MOUSE

MSCL_SALIYY
FAR3_HIRME
FAR4_HIRME
FAR4_HIRME
FARP_ARITR
ARITR
PRCT_PERAM
PRCT_PERAM
PSK_DAUCA
ACPH_RABIT
ALL2_CARMA
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CCF1_ENTFA
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FAR1_ASCSU
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	n update) .s lumbricoides), a .dorea; Ascaridida;	7 AA.		DB 1; Len . 1e+05; ches 0;	occoncelli P.S., illus sanfrancis ENVIRONMENTS. 2A8000 CRC64;	pdate) update) bacillus sani idium group;	6 AA.	ALIGNMENTS	ы үк хүх хүн байд С
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OVM_LEPDE STANDARD; PRT; 6 AA.

AC P4295;
DT 01-NOV-1995 (Rel. 32, Created)
DT 01-NOV-1995 (Rel. 32, Last sequence update)
DT 01-NOV-1995 (Rel. 32, Last annotation update)
DT 01-NOV-1995 (Rel. 32, Last annotation update)
DE OVIDUCTAL MOTILITY STIMULATING PEPTIDE (LED-OVN).
OS Leptinotarsa decemilineata (Colorado potato beetle).
OC Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
CC Pterygota; Neoptera; Endopterygota; Coleoptera; Polyphaga;
CC Cucujiformá; Dytophaga; Chrysomeloidea; Chrysomelidae;
CC Chrysomelinae; Leptinotatsa.
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CCF1_EN
P20104;
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Spittaels K., Schoofs L., Grauwels L., Smet H., van Damme J.,
Proost P., Torrekens S., de Loof A.;
"Isolation, identification and synthesis of novel oviductal motility
"Isolation, head peptide in the Colorado potato beetle, Leptinotarsa
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Meule A.G., Shaw C., Bowman J.W.;
"The FMRFamide-like neuropeptide AF2 (Ascaris suum) is present in the free-living nematode, Panagrellus redivivus (Nematoda, Rhabditida).";
Parasitology 109:351-356(1994).

1- FUNCTION: HAS EFFECTS ON MUSCLE TENSION.

1- TISSUE SPECIFICITY: FOUND IN THE NERVE CORDS AND A VARIETY OF GANGLIA PARTICULARLY IN THE ANTERIOR REGIONS.
                                                                                                                                                                                                                                                                                                                                                                                                                           Neuropeptide; Amidation.
MOD_RES 6 6
SEQUENCE .6 AA; 720 MW
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SEQUENCE 7 AA; 992 MW; 69D4073B5B11E350 CRC64;
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Peptides 14:423-430(1993).
[2]
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01-FEB-1991 (Rel. 17,
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21-JUL-1986 (Rel. 01, Created)
21-JUL-1986 (Rel. 01, Last sequence update)
21-JUL-1986 (Rel. 01, Last annotation update)
HYPOTHALAMIC HEPTAPEPTIDE.
Sus scrofa (Fro)
                                                                                                                                                                                                                                                                                                                                                                                                         Chang R.C.C., Huang W.-Y., Arimura A., Redding T.W., Coy D.H., Saffran M., Kong A., Hamilton J.W., Cohn D.V., Schally A.V.; "Isolation, structure and synthesis of a heptapeptide with in vitro ACTH-releasing activity from porcine hypothalamus."; Horm. Metab. Res. 13:228-232(1981).

PIR: A01417, NVPG7.

SEQUENCE 7 AA; 957 MW; 632B45B1FB5059A0 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sus scrofa (Pig).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalla; Butherla; Cetartiodactyla; Suina; Suidae;
CEI_TaxID=9823;
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J. Biol. Chem. 263:14574-14578(1988).
-i-FUNCTION: CCF10 IS INVOLVED IN THE CONJUGATIVE TRANSFER OF THE HEMOLYSIN PLASMID PCF10.
PIR, A30812; A30812.
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"Structure of CCFIO, a peptide sex pheromone which induces conjugative transfer of the Streptococcus faecalis tetracycline
Last sequence update)
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Bacillus/Clostridium group; Enterococcaceae;
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update)
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A34026	S17976	S20446	A43129	149421	149424	в33932	I49808	H48394	в56979	137263	A60986	A44692	PQ0689	139965	I39966	I39964	I84439	137013	161883	A37832
acetylcholinestera	glucose isomerase	elastase - Pseudom	neuropeptide GNFFR	laminin B1 - weste	cytotoxic T-lympho	Ig mu chain D regi	D-SP2.5 region - m	glycoprotein compo	collagen alpha 1(I	Y protein - human	N-formyl oligopept	fulicin – giant Af	photosystem I 10.4	ribosomal protein	ribosomal protein	ribosomal protein	protamine Pl - sav	protamine P1 - Cer	protamine P1 - ora	phenol 2-monooxyge

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RESULT 1
$25266
$25266
pilE protein - Escherichia coli (fragment)
C;Species: Escherichia coli
C;Date: 28-May-1993 #sequence_revision 28-May-1993 #text_change 11-Jun-1993
C;Accession: $25266
R;Duppuy, B; Taha, M.K.; Possot, O.; Marchal, C.; Pugsley, A.P.
Mol. Microbiol. 6, 1887-1894, 1992
A;Title: PulO, a component of the pullulanase secretion pathway of Klebsiella oxytoca
A;Title: PulO, a component of the pullulanase secretion pathway of moment of the pullulanase secretion pathway of Klebsiella oxytoca
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509237

RESULT 2

RESULT 3

RESULT 2

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RESULT 3

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RESULT 3

RESULT 3

RESULT 4

RESULT 4

RESULT 4

RESULT 4

RESULT 5

RESULT 4

RESULT 5

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A; Residues: 1-5 <PET>
A; Experimental source: st
C; Keywords: cell wall; gl
                                                                                                                                                                                                                                                                                                                                                                                                                      R:Peters, J.; Nitsch, M.; Kuehlmorgen, B.; Golbik, R.; Lupas, A.; Kellermann, J.; Eng J. Mol. Biol. 245, 385-401, 1995
A;Title: Tetrabrachion: a filamentous archaebacterial surface protein assembly of unu A;Reference number: S69237; MUID:95139068
A;Accession: S69237
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A;Gene:
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A; Residues: 1-7
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3; Conserva
         h 37.1%; Score 13; DB Similarity 100.0%; Pred. No. 2: 3; Conservative 0; Mismatches
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75.0%;
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Pred. No. 2.2e+05;
1; Mismatches 0;
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DB 2; L. 2.2e+05; 0;
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Indels

0;

Gaps

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RESULT 4

S71867

glutathione transferase (BC 2.5.1.18) class alpha 5 - pig (fragment)

N;Alternate names: glutathione S-transferase class alpha 5

C:Species: Sus scrofa domestica (domestic pig)

C:Date: 19-Mar-1998 #sequence_revision 17-Apr-1998 #text_change 07-May-1999

C:Accession: S71867

R; Roulini, P:; Anglade, P.; Debrauwer, L.; Tulliez, J.

Biochem. J. 317, 879-884, 1996

A:Title: Characterization of pig liver glutathione S-transferases using HPLC-electrospra

A:Reference number: S71864; MUID:96332484

A:Accession: S71867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Title: Identification of conserved potential regulatory sequences of the protamine-end A;Reference number: I37013; MUID:94040810
A;Reference number: I37013; MUID:94040810
A;Status: preliminary; translated from GB/EMBL/DDBJ
MOLECULE type: DMA
Residues: 1-6 (RESA
A;Cross-references: EMBL:Z12145; NID:g22910; PIDN:CAA78129.1; PID:g579612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  protamine P1 - gorilla (fragment)
C:Specias: Gorilla gorilla (gorilla)
C:Date: 04-Oct-1996 #sequence_revision 04-Oct-1996 #text_change 21-Jul-2000
C:Accession: I37027
R-phycoerythrin alpha-1 chain - red alga (Gastroclonium coulteri) (fragment) (Species: Gastroclonium coulteri) (C;Species: Gastroclonium coulteri) (C;Date: 07-Mar-1988 #sequence_revision 07-Mar-1988 #text_change 23-Mar-1993 C;Accession: A22565 R;Klotz, A.V.; Glazer, A.N.
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                                                                                                                                                                                                                                                                                                                                                                                  es of damage
C;Superfamily: glutathione transferase
C;Keywords: dimer; transferase
                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Description: catalyzes the nucleophilic conjugation of intracellular glutathione to a A;Description: catalyzes the nucleophilic setabolism A;Pathway: detoxification; xenobiorics metabolism A;Note: increased hydrophilicity of GSH-conjugates facilitates their further metabolism
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R:Queralt, R.; Oliva, R.
Gene 133, 197-204, 1993
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mitochondrial form are known.
C;Complex: dimer
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Best Local Similarity 40.0
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R-phycoerythrin gamma-A chain - red alga (Gastroclonium coulteri) (fragment) (Species: Gastroclonium coulteri) (fragment) (C;Species: Gastroclonium coulteri) (C;Date: 07-Mar-1988 #sequence_revision 07-Mar-1988 #text_change 23-Mar-1993 C;Accession: F2256 R;Klotz A.V.; Glazer, A.N. J. Stotz, A.V.; Glazer, A.N. J. Biol. Chem. 260, 4856-4863, 1985 A;Title: Characterization of the bilin attachment sites in R-phycoerythrin. A;Reference number: A22565; MUID:85182601 A;Accession: F22565 AUDIO:85182601 A;Recsidues: 1-5 <KLO>
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A;Title: Characterization of the bilin attachment sites in R-phycoerythrin.
A;Reference number: A22565; MUID:85182601
A;Accession: A22565
A;Molecule type: protein
A;Residues: 1-3 <KIO>
T-cell receptor gamma chain (1t.22) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 07-May-1999
C;Accession: A41946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-5 - CBRA>
A;Cross-references: GB:M63747
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C;Species: Escherichia coli
C;Species: Escherichia coli
C;Date: 11-Sep-1992 #text_change 23-Mar-1993
C;Accession: B37325.
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J. Bacteriol. 173, 1789-1800, 1991
A;Title: Evidence for a methylation-blocking factor (mbf) locus involved in pap pilus A;Reference number: A37325; MUID:91154136
A;Accession: B37325
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nes 2; Conserv
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100.0%; Pred. No. 2.2e+05.
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100.0%; Pred. No. 2.2e+05
tive 0; Mismatches 0;
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100.0%; Pred. No. 2.2e+05;
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Result
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Maximum Match 100%
Listing first 50 summaries
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     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Match
  US-09-281-760C-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       212252 seqs, 22503292 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gapop 10.0 , Gapext 0.5
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/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
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/cgn2_6/ptodata/1/iaa/backfiles1.pep:*
                                                                                                                                                                                                                                                                                                                                                           Length
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 US-08-968-676-25
US-08-968-676-24
US-08-968-676-24
US-09-273-565-60
US-09-139-802-140
US-08-355-198-11
US-08-355-198-11
US-08-160-604-117
US-08-160-604-117
US-09-147-078-31
US-09-147-078-31
US-09-147-614-2
US-08-9214-614-2
US-08-9214-614-2
US-08-928-676-27
US-08-928-488-69
US-08-428-488-61
US-08-428-488-63
US-08-428-488-69
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                                                                                                                                                                                                                                                                                                          Sequence 25, Sequence 24, Sequence 22,
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Sequence
Sequence
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Sequence
Sequence
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559 Appl
61, Appl
62, Appl
62, Appl
63, Appl
64, Appl
65, Appl
65, Appl
66, Appl
67, Appl
68, Appl
69, Appl
71, Appl
                                                                                                                                                                24, Appl
22, Appl
60, Appl
11, Appl
21, Appl
21, Appl
21, Appl
31, Appl
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ALIGNMENTS	US-08-968-676-26 US-08-752-844-12	-08	US-08-473-022-2 US-08-705-660-27 US-08-705-660-28	US-08-441-871-68 US-08-441-871-70	US-08-441-871-65 US-08-441-871-66	00	80-	-42 -20	US-08-255-272-22 US-08-335-198-25	80-
	Sequence 26, Appl Sequence 12, Appl	61, 81,	Sequence 2, Appli Sequence 27, Appl Sequence 28, Appl	70,	• •	Sequence 1, Appli Sequence 63, Appl	2, 7	20, 15,	Sequence 22, Appl Sequence 25, Appl	72, 73,

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RESULT 1
US-08-968-676-25
                                                                   ; MOLECULE TYPE: US-08-968-676-25
                                                                                                                                                                                           CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: FAITELL, Kevin M
REGISTRATION NUMBER: 35,505
REFERENCE/DOCKET NUMBER: REH-
TELECOMMUNICATION INFORMATION:
TELEPHONE: (207) 363-0558
TELEPAX: (207) 363-0528
INFORMATION FOR SEQ ID NO: 25:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 25, Appli
Patent No. 5919639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: Kevin M. Farrell, P.C.
STREET: P.O. Box 999
                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
APPLICATION NUMBER: US,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Xu, Minzhen TITLE OF INVENTION: IMMUNOTHERAPY BY MODULATION OF ANTIGEN NUMBER OF SEQUENCES: 165
                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 5 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: P.O. Box
CITY: York Harbor
STATE: ME
                                                                                                        TOPOLOGY:
                                                                                                                       STRANDEDNESS:
                                                                                                                                       TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03911
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Adams, Sharlene
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                                                                                                        linear
                                                                                   peptide
                                                                                                                       single
58.3%;
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Score 14;
Pred. No.
DB 2;
1.6e+05;
                 Length
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Query Match Best Local Similarity

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COMPUTER READABLE FORM:

COMPUTER READABLE FORM:

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC_DOS/MS-DOS
OPERATING SYSTEM: PC_DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: US/08/968,676
FILING DAFF:
CLASSIFICATION: 424
APPLICATION INFORMATION:
APPLICATION INFORMATION:
NAME: FAITELL Revin M
REGISTRATION NUMBER: REH-9601
FELEPHONE: (207) 363-0528
FELEPAX: (207) 363-0528
INFORMATION FOR SED ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 6 amino acids
TYPE: amino acids
                                                                                                                                                                                        US-08-968-676-22
Sequence 22, Application US/08968676
Patent No. 5919639
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-968-676-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
US-08-968-676-24
                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Humphreys, Robert E
APPLICANT: Humphreys, Robert E
APPLICANT: Adams, Sharlene
APPLICANT XU, Minzhen
TITLE OF INVENTION: IMMUNOTHERAPY BY MODULATION OF ANTIGEN
NUMBER OF SEQUENCES: 165
CORRESPONDENCE ADDRESS:
ADDRESSEE: Kevin M. Farrell, P.C.
STREET: P.O. BOX 999
CITY: York Harbor
STATE: ME
COUNTRY: USA
ZIF: 03911
ZIF: 03911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 24, Application US/08968676
Patent No. 5919639
GENERAL INFORMATION:
                                                                                    APPLICANT: Humphreys, Robert E
APPLICANT: Adams, Sharlene
APPLICANT: Xu, Minzhen
TITLE OF INVENTION: IMMUNOTHERAPY BY MODULATION OF ANTIGEN
NUMBER OF SEQUENCES: 165
                                                                 CURRESPONDENCE ADDRESS:
ADDRESSEE: Kevin M. Farrell, P.C. STREET: P.O. Box 999
CITY:, York Harbor
                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 60.
                                                                                                                                                                                                                                                                                                                                           1 YRMKL 5
                                                                                                                                                                                                                                                                                                                                                                                  4 YRXXL 8
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                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: FIGUINARA, TSUTOMU
APPLICANT: WATANABE, TAKESHI
APPLICANT: WATANABE, TAKESHI
APPLICANT: HORIE, MASATO
TITLE OF INVENTION: AN ISOLATED NUCLEIC ACID MOLECULE ENCODING HUMAN
TITLE OF INVENTION: KELETAL MUSCLE-SPECIFIC UBIQUITIN-CONJUGATING ENZYME
FILE REFERENCE: 0-53599
FILE REFERENCE: 0-53599
FILE REFERENCE: 0-53599
FILE REFERENCE: 0999-03-22
CURRENT APPLICATION NUMBER: 09/09/273,565A
CURRENT FILING DATE: 1999-03-29
EARLIER APPLICATION NUMBER: 09/055,699
EARLIER APPLICATION NUMBER: 09/820,170
EARLIER FILING DATE: 1997-03-19
FEARLIER FILING DATE: 1997-03-19
FEARLIER APPLICATION NUMBER: JP 63410/1996
EARLIER FILING DATE: 1997-03-19
FEARLIER APPLICATION NUMBER: JP 63410/1996
FEARLIER APPLICATION NUMBER: JP 63410/1996
FEARLIER APPLICATION NUMBER: JP 63410/1996
FEARLIER FILING DATE: 1997-03-05
NUMBER OF SEO.ID NOS: 95
SOPTWARE: Patentin Ver. 2.1
SEQ ID NO 60
IFMC7TH: 7
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                                                                                                                                                      ; LENGTH: 7
; TYPE: PRT
; ORGANISM: Bovine sp.
US-09-273-565-60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-968-676-22
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMONICATION INFORMATION:
TELEPHONE: (207) 363-0558
TELEPHONE: (207) 363-0558
TELEPHAX: (207) 363-0528
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 7 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
                   Query Match

Best Local Similarity bu.v

Conservative
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: FAITELL, KeVID M
REGISTRATION NUMBER: 35,505
REFERENCE/DOCKET NUMBER: RE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
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Local Similarity 60.0%;
tes 3; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: ME
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
       1 LXXYR 5
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                                                                   58.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Release #1.0, Version #1.25
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 Mismatches

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                                                                   Score 14; DB 4;
Pred. No. 1.6e+05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 14; DB 2; Length 7; Pred. No. 1.6e+05; O; Mismatches 2; Indels
                                                                                         DB 4; Length 7;
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Вb δÃ

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Title:
Perfect score:
Sequence:
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Maximum Match 100%
Listing first 50 summaries
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Maximum DB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Run on:
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seq length: 8
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A_Geneseq_1101:*

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2: /SIDS1/gcgdata/geneseq/geneseqp/AA1981.DAT:*
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28: /SIDS1/gcgdata/geneseq/geneseqp/AA1999.DAT:*
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Gapop 10.0 , Gapext 0.5
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Copyright (c) 1993 - 2000 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Opioid oligopeptid	AAR55508	15	5	58.3	14	11
Opioid oligopeptid	AAR55499	15	5	58.3	14	10
Peptide with opioi	AAR08321	11	Uī.	58.3	14	9
Leu- enkephalin.	AAP10205	Ν	U	58.3	14	8
HLA class I bindin	AAB75743	22	8	62.5	15	7
A. sydowi afl-SST	AAY51949	21	7	62.5	15	O
Human HLA-B27 pept	AAW59001	19	5	62.5	15	σı
Generic immunogeni	AAY69583	21	8	66.7	16	4
Bacteroides 100 kD	AAY34084	20	7	66.7	16	ω
Bacteroides 100 kD	AAY34080	20	7	66.7	16	2
Bacteroides 100 kD	AAY34076	20	7	66.7	16	
Description	ID	DB	Query Match Length DB	Query Match	Score	Result
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ES	SUMMARIES					

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AAW87342	AAWO / U.U.#	AAW87348	AAB81468	AAY67357	AAY10411	AAY47418	AAY46654	AAW47945	AAW24920	AAP51212	AAB31715	AAU03292	AAG62830	AAE06418	AAU15558	AAU15373	AAY50878	AAY69584	AAB21840	AAW93750	AAY42072	AAY42007	AAW47946	AAW60423	AAR24664	AAR24585	AAR06424	AAW84425	AAW47948	AAW59000	AAW58999	AAW50982	AAR83527	AAP60150	AAY69582	AAY69581	AAW47949	AAR55490
Peptide determined			т.	q	0		Immunogenic peptid	AE101 analogue eff	r stomati	Analgesic peptide.	de w	Fruit fly G protei	Amino acid sequenc		Schizophrenia-asso	Schizophrenia-asso	Antibody 8H.8 bind		Murine melanoma ho		Rheumatoid arthrit	Rheumatoid arthrit	AE101 analogue eff	Tumour homing pept		Immunomodulatory p	Peptide with delta	HIV-1 nucleic acid	AE101 analogue eff	Human HLA-B27 pept	Human HLA-B27 pept	Growth hormone rel	Zif268 zinc finger	o	Generic immunogeni		an	d oligopepti

ALIGNMENTS

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Braun J, Cohavy O; WPI; 1999-551215/46.	CA	12-мAR-1998; 98US-0041889.	12-MAR-1999; 99WO-US05492.	16-SEP-1999.	WO9945955-A1.	Bacteroides caccae.			Ulcerative colitis; histone; H1-like antigen; porin antigen; Bacteroides antigen; inflammatory bowel disease: TBD: pANCA;		Bacteroides 100 kDa antigen peptide fragment.		23-NOV-1999 (first entry)	AAY34076;		AAY34076 ID AAY34076 standard; peptide; 7 AA.	ILT 1

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The invention provides a method for the diagnosis, prevention and treatment of ulcerative colitis (UC) using histone HI-like antigen, porin antigen or a Bacteroides antigen as a target antigen. The now
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                                                                                                               Use of histone H1, porin or Bacteroides antigens as targets for the diagnosis, prevention and treatment of ulcerative colitis \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ulcerative colitis; histone; H1-like antigen; porin antigen; Bacteroides antigen; inflammatory bowel disease; IBD; pANCA;
                                                                        Example 6; Page 78; 134pp; English.
                                                                                                                                                                         WPI; 1999-551215/46.
                                                                                                                                                                                                              Braun J,
                                                                                                                                                                                                                                                                                      12-MAR-1998;
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Pred. No. 4.3e+05;
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Best Local :
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The invention provides a method for the diagnosis, prevention and treatment of ulcerative colitis (UC) using histone HI-like antigen, a porin antigen or a Bacteroides antigen as a target antigen. The novel method of diagnosing UC in a subject suspected of having inflammatory bowel disease (IBD) comprises: (1) obtaining a sample from the subject; (2) contacting the sample with a histone HI-like antigen, or perinuclear anti-neutrophil cytoplasmic antibody (pANCA)-reactive fragment, to form a complex of the histone HI-like antigen, or the pANCA-reactive fragment, and antibody to the histone HI-like antigen; and (3) detecting the presence or absence of the complex indicates that the subject has UC. The pANCA-reactive histone HI-like antigen, porin antigen and Bacteroides antigen are useful in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ulcerative colliis; histone; H1-like antigen; porin antigen; Bacteroides antigen; inflammatory bowel disease; IBD; pANCA; perinuclear anti-neutrophil cytoplasmic antibody; diagnosis;
                                                                                                                                                                                                                                                                                             Use of histone H1, porin or Bacteroides antigens as targets for the diagnosis, prevention and treatment of ulcerative colitis {\tt -}
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Pred. No. 4.3e+05;
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sp_virus:*
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052062 bacillus me
0919c2 borrelia bu
099d47 hydriastele
099d00 masoala mad
099c24 nenga pumil
099182 gnatholebia
p82618 periplaneta
09866 spinacia ol
09umh9 bomo sapien
035792 saccharomyc
050556 actinobacil
009258 synechococc
045889 clostridium
0921e9 neisseria ma
091949 buchnera ap
019958 gossypium a
019959 gossypium a
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PRELIMINARY; PRT; 8 AA. 52062; PRELIMINARY; PRT; 8 AA. 1-JUN-1998 (TYEMBLIE1. 06, Last sequence update) 1-JUN-1998 (TYEMBLIE1. 07, Last annotation update) 1-AUG-1998 (TYEMBLIE1. 07, Last annotation update) 101GB, actilus megaterium. actilus megaterium. actilus/Staphylococcus group; Bacillus. CBI_TAXID-1404; 1	RESULT Q9R9C2 ID Q AC Q DT 0	Qy Db	Que Bes Mat	SQ	DR	RA P	R OX	88	8 8	GN	D P	DT	D P	δŪ	RESULT 052062
es. 18; Gaps	2 9R9C2 9R9C2; PRELIMINARY; 9R9C2; PRELIMINARY; 1-MAY-2000 (TYEMBLITEL: 13, 1-MAY-2000 (TYEMBLITEL: 13,	LXXYR : MATYR	58.3%; Score 14; DB 2; Length 8; ilarity 40.0%; Pred. No. 4.7e+05; Conservative 1; Mismatches 2; Indels 0;	8 AA; 1057 MW;	Submitted (AUG-1997) to the EMBL/GenBank/DDBJ databases. EMBL; AF017181; AAB94056.1;	SEQUENCE FROM N.A. Fawcett P., Melnikov A., Youngman P.;	NCBI_TaxID=1404;	Bacillus/Staphylococcus group; Bacillus.	Bacillus megaterium. Bacillus megaterium.	SPOIIGB.	0/,	(TrEMBLrel. 06,	(TrEMBLrel, 06,	52062 PRELIMINARY; PRT; 8	L7 1 62

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O9GD00 PRELIMINARY; PRT; 8 AA.
09GD00;
01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2001 (TrEMBLrel. 16, Last annotation update)
RIBOSOMAL PROTEIN S16 (FRAGMENT).
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Q9GD47;
01-MAR-2001 (TrEMBLrel. 16, Created)
01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2001 (TrEMBLrel. 16, Last annotation update)
RIBOSOMAL PROTEIN S16 (FRAGMENT).
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Microbiology 144:07(0).
EMBL; AF022480; AAC35445.1;
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PLASMID CP32-3, POSSIBLE PARTITION PROTEINS, COMPLETE CDS (FRAGMENT).
Borrelia burgdorferi (Lyme disease spirochete).
Plasmid cp32-3.
Bacteria; Spirochaetales; Spirochaetaceae; Borrelia.
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SEQUENCE
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Spermatophyta; Magnoliophyta; Liliopsida; Arecaceae;
NCBI_TaxID-131271;
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Pred. No.
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Chloroplast.
Chloroplast.
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Arecaceae; Nenga.
NCBI_TaxID-131288;
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Chloropiast.
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Arecaceae; Masoala.
NCBI_TaxID=131286;
                                       01-MAY-1999 (TrEMBLrel. 10, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-MAR-2001 (TrEMBLrel. 16, Last annotation update)
CYTOCHROME OXIDASE I (FRAGMENT).
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01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2001 (TrEMBLrel. 16, Last annotation update)
01-MAR-2001 (TrEMBLRel. 16, Last annotation update)
RIBOSOMAL PROTEIN S16 (FRAGMENT).
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Local Similarity 100.0%;
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Pred. No.
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          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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Gapop 10.0 , Gapext
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UPAA_HUMAN
OVM_LEPDE
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                    P83157 cydia pomon P83157 cydia pomon P30095 homo sapien P40985 leptinotars p01153 sus scrofa P82152 cydia pomon P80430 rattus norv P81807 carcinus ma P81806 carcinus ma P81806 carcinus ma P81808 carcinus ma P81818 carcinus ma P81819 carcinus ma P81810 carcinus ma P81811 carcinus ma P81810 pomon P81806 porphyromon P
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     cydia
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RP

SEQUENCE. TISSUE=Plasma;

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		ted) sequence upd annotation u GE OF PLASMA	PRT		Score Pred. 0; Mi	AMIDATION 0B2879C45B57	THE ALI	A.; e alla	2829;	ㅁㅇ	ted) sequence annotati	PRT;	AL	ANG2_BOTJA CCKN_MACEU FAR3_HOMAM FAR4_HOMAM LCK8_LEUMA	AKH_MELML ALL5_CALVO ALL5_CYDPO	GFRP_MOUSE UN06_PINPS	FAR3_I	FAR1_ FAR2_ FAR2_	
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	Vertebrata; ; Hominidae;	ate) pdate) (SPOT 36)	8 AA.		ore 10; DB 1; Length 8; ed. No. 1e+05; Mismatches 5; Indels	73767 CRC64;	TATIN FAMILY.	tatin superfamily.	Scott A.G., Win	; Hexapoda; optera; Glos Cydia.	pdate)	8 AA.	NTS						
	Euteleostomi; Homo.	(FRAGMENT).						7.";	nstanley	da; Insecta Glossata; D				Q10582 P30369 P41486 P41487 P19990	P25423 P41841 P82156	P99025	P81298 P41874 P42564	P38499 P31890 P38498	
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Gaps

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RESULT 4
HY7_PIG STANDARD; PRT; 7 AA.
AC P01153;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 21-JUL-1986 (Rel. 01, Last annotation update)
DE HYPOTHALAMIC HEPTAPEPTIDE.
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Best Local !
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P43985;
01-NOV-1995 (Rel. 32, Created)
01-NOV-1995 (Rel. 32, Last sequence update)
01-NOV-1995 (Rel. 32, Last sequence update)
01-NOV-1995 (Rel. 32, Last annotation update)
0VIDUCTAL MOTILITY STIMULATING PERTIDE (LED-OVM).
Leptinotarsa decemlineata (Colorado potato beetle).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hazapoda; Insect
Pterygota; Neoptera; Endopterygota; Coleoptera; Polyphaga;
Chrysomelinae; Phytophaga; Chrysomeloidea; Chrysomelidae;
Chrysomelinae; Leptinotarsa.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=91271080; pubMed=2052497;
Spittaels K., Schoofs L., Grauwels L., Smet H., van Damme J.,
Proost P., Torrekens S., de Loof A.;
"Isolation, identification and synthesis of novel oviductal motility
stimulating head peptide in the Colorado potato beetle, Leptinotarsa
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SEQUENCE
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Peptides 12:31-36(1991)
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Hughes G.J., Frutiger S., Paquet N., Ravier F., Pasquali C.,
Sanchez J.-C., James R., Tissot J.-D., Bjellqvist B.,
Hochstrasser D.F.;
                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                         Neuropeptide; Amidation. 6 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE, AND SYNTHESIS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=7539
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                                                                                                                                                                                                                YK 4
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6 AA; 720 MW; 6B07632B5DD03000 CRC64;
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Pred. No. 1e+05;
0; Mismatches
                                                                                                                                                                                                                                                                                               1; Mismatches
                                                                                                                                                                                                                                                                                                                  Score 9;
Pred. No.
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1e+05;
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30-MAY-2000
30-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE, AND SYNTHESIS:
MEDLINE=81213980; PubMed=6263778;
Chang R.C.C. Huang W.-Y. Arimura A., Redding T.W., Coy D.H.,
Chang R.C.C. Huang W.-Y. Arimura D.D. Schally A.V.;
Saffran M., Kong A., Hamilton J.W., Cohn D.V., Schally A.V.;
"Isolation, structure and synthesis of a heptapeptide with in vitro
ACTH-releasing activity from porcine hypothalamus.";
Horm. Metab. Res. 13:228-232(1981).
PIR; A01417; NYPG7.
SEQUENCE 7 AA; 957 MW; 632B45B1FB5059AO CRC64;
                                                                                   P80430;
P80430;
O1-NOV-1995 (Rel. 32, Created)
O1-NOV-1995 (Rel. 32, Last sequence update)
O1-FEB-1996 (Rel. 33, Last annotation update)
CYTOCHROME C OXIDASE POLYPEPTIDE VIB (EC 1.9.3.1) (AED) (FRAGMENT).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Neuropeptide; Amidation.
MOD_RES 8 8
SEQUENCE 8 AA; 934 MW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE-98054539; PubMed-9392829;
Duve H., Johnsen A.H., Maestro J.-L., Scott A.G., Winstanley D.,
Davey M., East P.D., Thorpe A.;
"Lepidopteran peptides of the allatostatin superfamily.";
Peptides 18:1301-1309(1997).
Peptides 18:1301-1309(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sus scrofa (Pig).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae;
       Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cydia pomonella (Codling moth).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Lepidoptera; Glossata; Di
Tortricoidea; Tortricidae; Olethreutinae; Cydia.
                                               Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CYDIASTATIN
                                                                                                                                                                                             COXG_RAT
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(Rel. 39, Last sequence update)
(Rel. 39, Last annotation update)
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C82879C45B51F775 CRC64;
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Pred. No. 1e+(
0; Mismatches
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Pred. No.
       Craniata; Vertebrata;
Sciurognathi; Muridae;
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         Muridae;
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                          Euteleostomi;
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T-cell receptor ga	acylaminoacyl-pept	hypothetical prote	RNA-directed DNA p	ameletin - rat	peptidyl-dipeptida	serrawettin W2 - S	blood cell protein	Ig heavy chain CRD	proctolin - Atlant	Met-enkephalin - b	Leu-enkephalin - b	photosystem I 10.4	angiotensin-conver	major protein anti	proctolin - Americ	Ig mu chain V regi	Ig heavy chain CRD	globulin IV alpha	phenol 2-monooxyge	tyrosine-melanocyt

ALIGNMENTS

protamine P1 - gorilla (fragment) C;Species: Gorilla gorilla (gorilla) C;Species: Gorilla gorilla (gorilla) C;Date: 04-Oct-1996 #sequence_revision 04-Oct-1996 #text_change 21-Jul-2000 C;Accession: I37027 R;Gueralt, R; Oliva, R. Gene 133, 197-204, 1993 A;Title: Identification of conserved potential regulatory sequences of the protamine-A;Eeference number: I37013; MUID:94040810 A;Accession: I37027 A;Status: preliminary; translated from GB/EMBL/DDBJ A;Molecule type: DNA A;Residues: 1-6 (RES> A;Cross-references: EMBL:Z12145; NID:g22910; PIDN:CAA78129.1; PID:g579612 RESULT 2 A22565 R;Klotz, A.V.; Glazer, A.N. J. Biol. Characterization of the bilin attachment sites in R-phycoerythrin. A;Reference number: A22565 A;Reference number: A22565, MUID:85182601 A;Residues: 1-3 <KLO> Query Match Best Local S Matches 2 Matches Query Match Best Local 4 YR 1 LXXYR 5 1 MARYR Similarity 2; Conserv ப Similarity 2; Conserv Conservative 50.0%; Score 12; DB llarity 100.0%; Pred. No. 2. Conservative 0; Mismatches 54.2%; Score 13; DB Pred. No. 2.2e 1; Mismatches DB 2; Lc.. ,. 2.2e+05; 0; DB 2; 2.2e+05; Length 6; Length 3; Indels 0, 0; Gaps Gaps 0; 0

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R-phycoerythrin gamma-A chain - red alga (Gastroclonium coulteri) (fragment) (Species: Gastroclonium coulteri) (fragment) (C;Decies: Grastroclonium coulteri) (7-Mar-1988 #text_change 23-Mar-1993 C;Decession: F2255 R;Klotz, A.V.; Glazer, A.N. 18101. Chem. 260, 4856-4863, 1985 A;Title: Characterization of the bilin attachment sites in R-phycoerythrin. A;Reference number: A22565; MUID:85182601 A;Accession: F22565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Title: Rearrangement and junctional-site sequence analyses of T-cell receptor gamma ge A;Reference number: A41946; MUID:92049316
A;Recession: A41946
A;Status: preliminary; not compared with conceptual translation
A;Molecule type: DNA
A;Residues: 1-6 <MNE>
C;Keywords: T-cell receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         T-cell receptor gamma chain (lt.22) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 07-May-1999
C;Date: 03-Feb-1994 #sequence_revision 03-Feb-1994 #text_change 07-May-1999
C;Accession: A41946
R;Whetsell, M.; Mosley, R.L.; Whetsell, L.; Schaefer, F.V.; Miller, K.S.; Klein, J.R.
Mol. Cell. Biol. 11, 5902-5909, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                        A;Cross-references: GB:M30709; NID:g190253; PIDN:AAA65995.1; PID:g553616 C;Comment: This is the hypothetical translation of a viral sequence integrated into the C;Comment: It is translated in an incorrect, -1, reading frame of the L2 protein.
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pyruvate kinase (EC 2.7.1.40) - pig (fragment)
pyruvate kinase (EC 2.7.1.40) - pig (fragment)
C;Species; Sus scrofa domestica (domestic pig)
C;Date: 05-Jun-1987 #sequence_revision 05-Jun-1987 #text_change 03-Mar-1995
C;Accession: A11490
R;Hjelmquist, G.; Andersson, J.; Edlund, B.; Engstrom, L.
Biochem. Biophys. Res. Commun. 61, 559-563, 1974
A;Title: Anino acid sequence of a (32-P)phosphopeptide from pig liver pyruva
A;Reference number: A11490; MUID:75127438
A;Accession: A11490
A;Molecule type: protein
A;Residues: 1-6 <HJE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Accession: S11556
R;Fauque, G.; Lino, A.R.; Czechowski, M.; Kang, L.; DerVartanian, D.V.; Moura, J.J.G. Biochim. Biophys. Acta 1040, 112-118, 1990
A;Title: Purification and characterization of bisulfite reductase (desulfofuscidin) f A;Reference number: S11024; MUID:90335276
A;Accession: S11556
A;Molecule type: protein A;Residues: 1-6 <FMDY
C;Keywords: oxidoreductase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Accession: PT0030
R;Ettalibi, M.; Baratti, J.C.
Agric. Biol. Chem. 54, 61-68, 1990
A;Title: Molecular and kinetic properties of Aspergillus ficuum inulinases
A;Reference number: PT0030; MUID:90344234
A;Accession: PT0030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 7
$11556

hydrogensulfite reductase (EC 1.8.99.3) chain 2 - Desulfovibrio thermophilus (fragmen NyAlternate names: bisulfite reductase; desulfofuscidin C;Species: Desulfovibrio thermophilus C;Species: Desulfovibrio thermophilus C;Date: 19-Mar:1997 #sequence_revision 12-Dec-1997 #text_change 30-Jan-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Molecule type: protein
A;Residues: 1-8 <ETT>
C;Keywords: glycosidase; hydrolase; polysaccharide degradation
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N;Alternate names: inulase
C;Species: Aspergillus ficuum
C;Date: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change 07-May-1999
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Pred. No. 2.2e+05
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h: Mismatches 0;
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scoring table:
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Maximum Match 100%
Listing first 50 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-281-760C-5
63
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             212252 seqs, 22503292 residues
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Copyright (c) 1993 - 2000 Comp
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/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/FCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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                                                                    PCT-US95-13795-2
US-08-4432-016-2
US-08-644-594-2
US-08-641-985-113
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US-08-96-1190A-25
US-08-96-1190A-25
US-08-117-362-4
US-08-117-362-4
US-08-117-362-4
US-08-899-575-113
US-08-899-575-113
US-08-899-575-113
US-08-99-575-113
US-08-117-74
US-08-99-575-113
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US-09-346-237-4
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                                   Patent No.
Patent No.
Sequence
                                                                    sequence 3, Appli
Sequence 4, Appli
Sequence 4, Appli
Sequence 113, App
Sequence 113, App
Sequence 113, App
Sequence 113, App
Sequence 213, Appl
Sequence 25, Appl
Sequence 25
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Sequence 15, Appl	Sequence 15, Appl	Sequence 2, Appli	Sequence 2, Appli	Sequence 3, Appli	Sequence 13, Appl	Sequence 13, Appl	Sequence 4, Appli	Sequence 4, Appli	Sequence 6, Appli	Sequence 14, Appl	Sequence 12, Appl	•		-	-	Sequence 2, Appli	Sequence 119, App	Sequence 119, App	Sequence 34, Appl	Sequence 31, Appl		Sequence 7, Appli

ALIGNMENTS

```
RESULT 1
US-08-336-583-2
Sequence 2, Application US/08336583
Sequence 2, Application US/08336583
Patent No. 5629415
GENERAL INFORMATION:
APPLICANT: HOLLIS, GREGORY F.
APPLICANT: PATEL, MAYUR D.
TITLE OF INVENTION: DNA ENCODING
; MOLECULE TYPE: US-08-336-583-2
                                                                                                                                                                                                                                                                                                                                   ATTORNEY/NOTICE TO A TORNEY CARRY, CHALL BY A CARRY CARRY CHALL BY A CONTROL OF THE COMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 594-6734
TELEPHONE: (908) 594-6720
TORNEY CARRY CONTROL OF THE CARRY 
                                                                                                                                                                                                                                         TELEFAX: (908) 594-4720
INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
LENGTH: 426 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 07065-0900

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 09-NOV-1994
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: CARTY, CHRISTINE E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: DNA ENCODING CANINE IMMUNOGLOBULIN NUMBER OF SEQUENCES: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: RAHWAY
STATE: NEW JERSEY
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 09-NO
                                                                                                         TOPOLOGY:
                                                                                                                                                    STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
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126 E. LINCOLN AVENUE
                                                                                               SS: single
linear
                                                    protein
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Best Local Similarity Matches 11; Conserv

Conservative

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Mismatches

0.0014; DB 1;

Length 426; Indels

0;

0

100.0%; Score 63; 100.0%; Pred. No.

Query Match

밁

245 GMNLTWYRESK 255

1 GMNLTWYRESK 11

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ATTORNEY/AGENT INFORMATION:
NAME: CARTY, CHRISTIE E.
REGISTRATION NUMBER: 36,099
REFERENCE/DOCKET NUMBER: 19211
TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 594-6734
TELEPHONE: (908) 594-4720
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARRCTERISTICS:
SEQUENCE CHARRCTERISTICS:
LENGTH: 426 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULY 2
PCT-US95-13795-2
; Sequence 2, Application PC/TUS9513795
; GENERAL INFORMATION:
; APPLICANT: PATEL, MAYUR D.
TITLE OF INFUNTION: DNA ENCODING CANINE IMMUNOGLOBULINS
; UMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CHRISTINE E. CARTY
; ADDRESSEE: CHRISTINE E. CARTY
STREET: 126 E. LINCOLN AVENUE; P.O. BOX 2000
                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 3
US-08-432-016-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 126 E. LINCOLN AVENUE; P.O. BOX 2000
CITY: RAHWAY
STATE: NEW JERSEY
COUNTRY: USA
ZIP: 07065-0907
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: PCT/US95/13795
                                                                                                                                                                                                                                                                                                                                                                 Sequence 2, Application US/08432016 Patent No. 5968768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                              APPLICANT: HAYNES, BARTON F.
APPLICANT: ARUFFO, ALEJANDRO
APPLICANT: PATEL, DHAVALKUMAR
APPLICANT: BOWEN, MICHAEL A.
APPLICANT: MARQUARDT, HANS
TITLE OF INVENTION: CD6 LIGAND
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET:
                                                                              ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GMNLTWYRESK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 63; DB 5; Length 426; Similarity 100.0%; Pred. No. 0.0014; Conservative 0; Mismatches 0; Indels
                   SSEE: NIXON & VANDERHYE P.C.
T: 1100 NORTH GLEBE ROAD
ARLINGTON
VIRGINIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
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FEATURE:
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
OTHER INFORMATION:
US-08-432-016-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match

Best Local Similarity vv...

5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE: (703) 816-4000
TELEPAX: (703) 816-4100
INFORMATION FOR SEQ ID No: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 583 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2, Application US/08684594 Patent No. 5998172
                                                                                                                                                                                                                                                                                                                                            APPLICANT: HAYNES, BANALON APPLICANT: ARUPEO, ALELANDRO APPLICANT: PATEL, DHAVALKUMAR APPLICANT: BOWEN, MICHAEL A.
APPLICANT: MARQUARDT, HANS
MITTER OF INVENTION: CD6 LIGAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNMERE: US 08/333,350
ENPICATION UNMERE: US 08/333,350
FILING DATE: 02-NOV-1994
PRIOR APPLICATION DATA:
APPLICATION UNMERE: US 08/143,903
FILING DATE: 02-NOV-1993
ATTORNEY/AGENT INFORMATION:
NAME: WILSON, MARY J.
REGISTRATION UNMBER: 32,955
REFERENCE/DOCKET NUMBER: 1579-95
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 816-4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: HAYNES, BARTON F.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/08/684,594
FILLING DATE: 18 JUL-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION NUMBER: US/08/432,016 FILING DATE: 01-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPUTER: PC-DOS/MS-DOS
COERRATING SYSTEM: PC-DOS/MS-DOS
COERRATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: CD NUMBER OF SEQUENCES: 1 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       167 NITWYRNGK 175
                                                                                                                                                                                                                                     AUDRESSEE: NIXON & VANDERHYE P.C. STREET: 1100 NORTH GLEBE ROAD CITY: ARLINGTON
                                                                                                                                                                            COUNTRY: U.S.A.
ZIP: 22201-4714
                                                                                                                                                                                                                             STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 NLTWYRESK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'RY: U.S.A.
22201-4714
                                                                                                                                                                                                                        VIRGINIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         65.1%; Score 41; DB 2; Length 583; 66.7%; Pred. No. 15; Live 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Xaa = M/S
Xaa = M/T
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Gaps

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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/333,350
FILING DATE: 02-NOV-1994
PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA:

CLASSIFICATION:

APPLICATION NUMBER: FILING DATE: 01-MA

01-MAY-1995

US 08/432,016

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; TYPE: PRT; ORGANISM: Homo sapiens; PEATURE: FEATURE: OTHER INFORMATION: anti-Rh(D) chain Il6 US-09-240-274-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; OTHER INFORMATION: ; OTHER INFORMATION: US-08-684-594-2
д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-240-274-46
                                                                                                                                                                                                                                 SOFTWARE: PatentIn Ver. SEQ ID NO 46
                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 46, Application US/09240274
Patent NO. 6255455
GENERAL INFORMATION:
APPLICANT: Siegel, Donald L.
                                                            Matches
                                                                                       Query Match
                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/240,274
CURRENT FILING DATE: 1999-01-29
EARLIER APPLICATION NUMBER: 60/081,380
EARLIER FILING DATE: 1998-04-10
EARLIER APPLICATION NUMBER: 60/028,550
EARLIER FILING DATE: 1996-10-11
NUMBER OF SEQ ID NOS: 224
                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Siegel, Donald L.
TITLE OF INVENTION: Rh(D)-BINDING PROTEINS AND MAGNETICALLY ACTIVATED CELL
TITLE OF INVENTION: SORTING METHOD FOR PRODUCTION THEREOF
                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: 09596-4202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: (703) 816-41
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                      LENGTH: 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 583 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 08/143,903 FILING DATE: 02-NOV-1993 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     167 NITWYRNGK 175
                                                         Local Similarity
nes 5; Conserv
29 GENLNWYQQT 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: WILSON, MARY J.
REGISTRATION NUMBER: 32,955
REFERENCE/DOCKET NUMBER: 1579-112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
                           1 GMNLTWYRES 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 NLTWYRESK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amino acid
                                                           Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3) 816
, 816-4100
, NO: 2:
                                                                          50.0%;
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66.7%;
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                                                         Score 38; DB Pred. No. 7.5; 3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 41;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                          DB 4;
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15;
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                                                         2;
                                                                                       Length 107;
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                                                         Indels
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Best Local Similarity
Yorkshes 6; Conserv:
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                                                                                                                                                                                                                                В
                                                                                                                                                       US-08-481-985B-113
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                                                                                                                     Sequence 113, Application US/08481985B Patent No. 6011146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1. Patent No.
     GENERAL INFORMATION:
APPLICANT: Mottez, Estelle
APPLICANT: Abastado, Jean; Pierre
APPLICANT: Rourilsky, Phillipe
TITLE OF INVENTION: Altered Major Histocompatibility Complex
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 202-408-4400 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS-/MS-DOS
SOFTWARE: PatentIn Re-lease #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US 07/792,473
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APPLICATION NUMBER: U
FILING DATE: 05-DEC-
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MEDIUM TYPE: Floppy Disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
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                                                                                                                                                                                                                              144 INITWLRNSK 153
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REFERENCE/DOCKET NUMBER: 03495.0106-03000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 0 FILING DATE: 15-NOV-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08 FILING DATE: 07-JUNE-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: D.C.
ZIP: 20005-3315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 1300 1 S
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: 202-408-4400
TELEPHONE: 202-408-4400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
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                                                                                                                                                                                                                                                                2 MNLTWYRESK 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        113, Application US/08484905
o. 5976551
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                                                                                                                                                                                                                                                                                                                                                                                                                                           amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           256 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Abastado, Jean-Pierre
Kourilsky, Philippe
FENTION: An Altered Major Histocompatibility
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mottez, Estelle
                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                202-408-4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dunner
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-DEC-1991
                                                                                                                                                                                                                                                                                                                 60.3%;
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148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Complex(MHC) Determinant and Methods
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                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                 Score 38; DB
Pred. No. 20;
                                                                                                                                                                                                                                                                                                                                      2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Garrett
                                                                                                                                                                                                                                                                                                                                Length 256;
                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for Using the
                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                   Gaps
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STREET: 1300 1 s CITY: Washington

E: Dunner 1300 I Street, N.W., Suite 700

Finnegan, Henderson, Farabow, Garrett &

ADDRESSEE:

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 113, Application US/08370476 Patent No. 6153408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNBER: US 07/792
FILING DATE: 15-NOV-1991
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: MEYETS, Kenneth J.
NAME: MEYETS, Kenneth J.
REGISTRATION UNBER: 25,146
REGISTRATION UNBER: 0349,
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO: 113:
SEQUENCE CHARACTERISTICS:
LENGTH: 256 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                      STREET: 1300 _
STREET: Mashington
STATE: D.C.
SIP: 20005-3315
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
ZIP: «CONTROL OF THE PROPERTY 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/801,818
FILING DATE: 05-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 127 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Lone, Yu-Chun APPLICANT: Ojcius, David APPLICANT: Osrouge, Armanda TITLE OF INVENTION: Altered PITTLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Mottez, Estelle
APPLICANT: Abastado, Jean-Pierre
APPLICANT: Kourilsky, Phillipe
APPLICANT: Lone, Yu-Chun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: linear MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            144 INITWLRNSK 153
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STATE: D.C.
STP: 20005-3315
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                                                                                                                                                                                                                                                                                                         ADDRESSEE: Finnegan, Henderson, Farabow, Garrett & ADDRESSEE: Dunner STREET: 1300 I Street, N.W., Suite 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 MNLTWYRESK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Altered Major Histocompatibility Complex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60.3%;
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Pred. No. 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  03495.0106-04000
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; MOLECULE TYPE: peptide US-08-370-476-113
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SOPTWARE: FASTEM: DOS.

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/960,190A
FILING DATE: 29-0CT-1997
CLASSIFICATION DATA:
APPLICATION NUMBER: FILING DATE: FILING DATE: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No.
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Best Local :
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INFORMATION FOR SEQ ID NO: 113:
SEQUENCE CHARACTERISTICS:
LENGTH: 256 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/117,575
FILING DATE: 07-SEP-1993
APPLICATION NUMBER: US 08/072,787
FILING DATE: 06-JUN-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/801,818
PRIOR APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US 07/801,818
FILING DATE: 05-DEC-1991
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
COMPUTER: IBM Compat
OPERATING SYSTEM: DO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acids
Type: amino acid
TypeLog: line
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: Meyers, Kenneth J.
REGISTRATION NUMBER: 25,146
REGISTRATION NUMBER: 05;
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-408-4000
                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Rhode, Peter R.
APPLICANT: Acevedo, Jorge
APPLICANT: Burkhardt, Martin
APPLICANT: Jiao, Jin-an
APPLICANT: Wong, Hing C.
TITLE OF INVENTION: SOLUBLE MHC COMPLEXES AND
TITLE OF INVENTION: METHODS OF USE THEREOF
NUMBER OF SEQUENCES: 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US 0
FILING DATE: 15-NOV-1991
APTORNEY/AGENT INFORMATION.
NAME: MOVER'S KENDATH J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        144 INITWLRNSK 153
                                                                                                                                                                                                                                                                                             STREET: 130 W
CITY: Boston
STATE: MA
                                                                                                                                                                                                                                                       COUNTRY: usa ZIP: 02109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
les 6; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 MNLTWYRESK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5, Application US/08960190A
6232445
                                                                                                                                                                                                                                                                                         MA
                                                                                                                                                                                                                                                                                                                                    130 Water Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                       E: Diskette
IBM Compatible
                                                                                                                                                                                                                                                                                                                                                      Dike, Bronstein, Roberts & Cushman, LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60.3%;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 4; Length 256;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
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ATTORNEY/AGENT INFORMATION:

NAME: Corless, Peter F REGISTRATION NUMBER: 3

48002

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; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-117-362-3
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; FRAGMENT TYPE:
US-08-960-190A-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-117-362-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3, Application US/08117362 Patent No. 5595872
   Query Match
Best Local Similarity
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Matches 6; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
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LENGTH: 500 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                          TELEFAX: (609) 252-4526 INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FIM PC COMPATION
OPERATING SYSTEM: PC-POS/MS-POS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/117,362
FILING DATE: 03-SEP-193
CLASSIFICATION: 435
CLASSIFICATION: 435
CLASSIFICATION: 435
                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 860 amino acids
TYPE: amino acid
                                                                                                                                                                                                                           REFERENCE/DOCKET NUMBER: DC TELECOMMUNICATION INFORMATION: TELEPHONE: (609) 252-5901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-523-3400
TELEFAX: 617-523-6440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: Gaul, Timothy J.
REGISTRATION NUMBER: 33,111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: MICROSOMAL TRIGLYCERIDE TRANSFER PROTEIN NUMBER OF SEQUENCES: 32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      388 INITWLRNSK 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Princeton
STATE: New Jerse
                                                                                                                       STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: 480
LECOMMUNICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08543-4000
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P.O. Box 4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sharp, Daru Y.
Gregg, Richard E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  internal
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   58.7%;
100.0%;
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Score 37; Pred. No.
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                                                                                                                                                                                                                                                               DC21b
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Pred. No. 41;
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     DB 1; Length 860; 1.1e+02;
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; MOLECULE TYPE:
US-08-486-924-3
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                                                                                                                                                     RESULT 12
US-08-117-362-4
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                                                                                                 Sequence 4, Application US/08117362
Patent No. 5595872
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: (609) 252-45
TELEFAX: (609) 252-45
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: Gaul, Timothy J.
REGISTRATION NUMBER: 33,111
REFERENCE/DOCKET NUMBER: DC21
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/486,924
FILING DATE: 07-JUN-1995
APPLICANT: Wetterau II, John R.
APPLICANT: Sharp, Daru Y.
APPLICANT: Gregg, Richard E.
APPLICANT: GROSOMAL TRIGLYCERIDE TRANSFER PROTEIN
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Sharp, Daru Y.
APPLICANT: Gregg, Richard E.
TITLE OF INVENTION: MICROSOMAL TRIGLYCERIDE TRANSFER PROTEIN
NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                     736 WYRESK 741
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                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS: single TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STREET:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E: Burton Rodney P.O. Box 4000
                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (609) 252-5901
(609) 252-4526
R SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                   protein
                                                                                                                                                                                                                                                                                                   58.7%; Score 37; 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US 08/117,362
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                                                                                                                                                                                                                                                                                   Gaps
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                                                                                                                                                                                                                                                                                     0;
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STREET: P.O. BO: CITY: Princeton STATE: New Jers

P.O. Box 4000

Burton Rodney

ADDRESSEE:

ZIP: 08543-4000 COUNTRY:

New Jersey

0;

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COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: PATENTIN Release $1.0, Version $1.25
CURRENT APPLICATION UNMBER: US/08/117,362
FILING DAME: 03-SED-199
FILING DAME: 03-SED-1993
CLASSIFICATION: 435
INTORNEY/AGENT INFORMATION:
NAME: GAUL TIMOCHY J.
REGISTRATION NUMBER: DC21b
REFERENCE/DOCKET NUMBER: DC21b
TELECOMMUNICATION INFORMATION:
TELEPHONE: (609) 252-5901
TELEPAX: (709) 252-5901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     망
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US-08-486-924-4
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                                                                                                                                                                                                                  COUNTRY: U.S.A.

ZIP: 08543-4000

COMPUTER REALABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATA:
APPLICATION DATE: 07-UN-1995
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSED.
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/117,362
.FILING DATE: 03-SEP-1993
ATTORNEY/AGENT INFORMATION:
NAME: Gaul, Timothy J.
REGISTRATION NUMBER: 33,111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Wetterau II, John R. APPLICANT: Sharp, Daru Y. APPLICANT: Gregg, Richard E. TITLE OF INVENTION: MICROSOMAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        770 WYRESK 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: P.O. Bo:
CITY: Princeton
STATE: New Jers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6 WYRESK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New Jersey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 E: Burton Rodney
P.O. Box 4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             58.7%; Score 37; DB 1; L
100.0%; Pred. No. 1.2e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
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; MOLECULE TYPE: protein US-08-276-852-113
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                                                                                            Sequence 113, Application US/08276852

Patent No. 5652138

Patent No. 5652138

APPLICANT: Burton; Dennis R
APPLICANT: Burton; Dennis R
APPLICANT: Burton; Carlos F
APPLICANT: Lerner, Richard A
TITLE OF INVENTION: HUMAN NEUTRALIZING MONOCLONAL ANTIBODIES
TITLE OF INVENTION: TO HUMAN IMMUNODEFICIENCY VIRUS
NUMBER OF SEQUENCES: 170

CORRESPONDENCE ADDRESS:
ADDRESCETA TO A CONTROL OF THE PART OF THE PART
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Best Local Similarity 100.
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TELECOMMUNICATION INFORMATION:
TELEPHONE: (609) 252-5901
TELEFAX: (609) 252-4526
INFORMATION FOR SEQ ID NO: 4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 08/178,302
PRICE DATE: 30-SEP-193
PRICE APPLICATION DATA:
APPLICATION NUMBER: US 07/954,148
FILING DATE: 30-SEP-1932
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/276,852
FILING DATE: 18-JUL-1994
CLASSIFICATION: 514
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: The Scripps Research Institute, Office of ADDRESSEE: Patent Counsel STREET: 10666 No. 5652138th Torrey Pines Road, Suite 220, STREET: Mail Drop TPC8 CITY: La Jolla STRTE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE:
                                                                          LENGTH: 96 amino TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                      NAME: Fitting, Thomas REGISTRATION NUMBER: 34,163 REFERENCE/DOCKET NUMBER: SCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6 WYRESK 11
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TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          92037
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100.0%; Pred. No. 1.2e+02;
tive 0; Mismatches 0;
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RESULT
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                                                                                                    Matches
                                                                                                                              Query Match
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CLASSIFICATION: 435

PRIOR APPLICATION UNMBER: US 08/276,852

APPLICATION NUMBER: US 08/178,302
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                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 113:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/899,575
FILING DATE: 24-JUL-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/954,148
FILING DATE: 30-SEP-1992
ATTORREY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Lerner, Richard A
TITLE OF INVENTION: HUMAN NEUTRALIZING MONOCLONAL ANTIBODIES
TITLE OF INVENTION: TO HUMAN IMMUNODEFICIENCY VIRUS
                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                     TYPE: a
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                                                                                                   Local Similarity tes 5; Conserv
                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: The Scripps Research Institute, Office of ADDRESSEE: patent Counsel STREET: 10666 No. 5770440th Torrey Pines Road, Suite 220, STREET: Mail Drop TPC8
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nes 5; Conserv
                                                                                                                                                                                                                                                                                                                                      NAME: Fitting, Thomas REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
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16
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                                                                      1 GMNLTWYRE 9
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                                          GTNLAWYQQ 25
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                                                                                                                                                                                                       linear
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Carlos F
                                                                                                                57.1%;
55.6%;
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55.6%;
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                                                                                                                Score 36; DB
Pred. No. 15;
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                                                                                                   Mismatches
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                                                                                                                                DB 1;
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                                                                                                   2;
                                                                                                                             Length 96;
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                                                                                                   Indels
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; MOLECULE TYPE: US-08-899-575-113
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PCT-US95-08743-113
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                                                                                                                                       Sequence 113, Application PC/TUS9508743 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                               Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, \
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/899,575
FILING DATE: 24-UUL-1997
CLASSIFICATION:
TITLE OF INVENTION: HUMAN NEUTRALIZ
TITLE OF INVENTION: TO HUMAN IMMUNO
NUMBER OF SEQUENCES: 170
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/276,852
FILING DATE: 18-JUL-1994
APPLICATION NUMBER: US 08/178,302
FILING DATE: 30-SEP-1993
PRIOR APPLICATION NUMBER: US 07/954,148
APPLICATION NUMBER: US 07/954,148
FILING DATE: 30-SEP-1992
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 30-SEP-1992
ATTORNEY/AGENT INFORMATION:
NAME: Fitting, Thomas
REGISTRATION NUMBER: 34,163
REFERENCE/DOCKET NUMBER: SCRI
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS
                                                                                                                           APPLICANT:
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CITY: La Jolla
STATE: CA
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17 GTNLAWYQQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: amino acid
TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH:
                                                                                                                                                                                                                                                                           1 GMNLTWYRE 9
                                                                                                                                                                                                                                                                                                             Similarity
5; Conserv
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24-JUL-1997
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Carlos F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Richard A
                                                                                                                                                                                                                                                                                                                               57.1%;
55.6%;
                                                                                       HUMAN NEUTRALIZING MONOCLONAL ANTIBODIES TO HUMAN IMMUNODEFICIENCY VIRUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HUMAN NEUTRALIZING MONOCLONAL ANTIBODIES TO HUMAN IMMUNODEFICIENCY VIRUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             170
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                                                                                                                                                                                                                                                                                                               2;
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                                                                                                                                                                                                                                                                                                                                             1; Length 96;
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В
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US-08-569-147-74
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PCT-US95-08743-113
                                                                    Matches
                                                                                  Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 74, Application US/08569147 Patent No. 6180377
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                          TELEFAX: (215) 568-3439
INFORMATION FOR SEQ ID NO: 74:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 08/276,852
FILING DATE: 18-UUL-1994
INFORMATION FOR SEG ID NO: 113:
SEQUENCE CHARACTERISTICS:
LENGTH: 96 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                             NAME: TRUÍLIO, DOTGEN YALKO
REGISTRATION NUMBER: 35,719
REFERENCE/DOCKET NUMBER: CARP-0047
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 568-3100
                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/08743
FILING DATE: 11-JUL-1995
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: HUMANISED ANTIBODIES NUMBER OF SEQUENCES: 95
CORRESPONDENCE ADDRESS:
                              3 NLTWYRESK 11
                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/
FILING DATE: 25 March-1996
CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz & ADDRESSEE: No. 6180377ris, LLP STREET: One Liberty Place - 46th Floor CITY: Philadelphia STATE: PA
                                                                                    Match 57.1%; Local Similarity 55.6%;
                                                                                                                                                                                          LENGTH: 128 amino acids TYPE: amino acid TOPOLOGY: linear
52 NLAWYRQKQ 60
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                                                                                    Score 36; DB Pred. No. 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 36; DB 5;
Pred. No. 15;
2; Mismatches
                                                                    Mismatches
                                                                                                    DB 4; Length 128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2;
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                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                  Gaps
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                                                                  0;
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Sequence 25, Application US/08284391B; Patent No. 5851828; GENERAL INFORMATION:
                                                                                                                                                                                              US-08-284-391B-25
                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; MOLECULE TYPE: amino acid US-08-417-495-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 0078
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-5070
TELEFAX: (617) 542-8906
TELES: 200154
INFORMATION FOR SEQ ID NO: 25:
SEQUENCE CHARACTERISTICS:
LENGTH: 182 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
APPLICANT: Seed, Brian
APPLICANT: Banapour, Babak
APPLICANT: Romeo, Charles
APPLICANT: Kolanus, Waldemar
TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
TITLE OF INVENTION: CELLS BY CHIMERIC CD4 RECEPTOR- BEARING CELLS
NUMBER OF SEQUENCES: 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PS/2 Model 50Z or 55SX
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOSTWARE: Wordperfect (Version 5.0)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Redirect: TITLE OF INVENTION: Receptor NUMBER OF SEQUENCES: 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: 225 F
CITY: Boston
STATE: MA
                                                                                                                                                                                                                                                                            52 NITWFKDGK 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: March CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US/07/847,566 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 07/665,961 FILING DATE: March 7, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/417,495 FILING DATE:
                                                                                                                                                                                                                                                                                                               3 NLTWYRESK 11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  02110-2804
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                                                                                                                                                                                                                                                                                                                                                                  57.18;
44.48;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/08/203,866
                                                                                                                                                                                                                                                                                                                                                     4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                  Score 36;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                00786/119002
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                                                                                                                                                                                                                                                                                                                                                                                      DB 2; Length 182;
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                                                                                                                                                                                                                                                                                                                                                   0;
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                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                     0;
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elbing LLP

STREET:

176 Federal Street

Boston

ΜA

COUNTRY: US ZIP: 02110

USA

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/195,395
FILING DATE: 14-FEB-1994
APPLICATION NUMBER: 07/847,566
FILING DATE: 06-MAR-1992
APPLICATION NUMBER: 07/665,961
FILING DATE: 07-MAR-1991
ATTORNEY/AGENT INFORMATION:
NAME: Elbing, Karen L
                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                      09-218-950-25
          COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
                                                                                                                                                                                    APPLICANT: Seed, Brian
APPLICANT: Banapour, Babak
APPLICANT: Romeo, Charles
APPLICANT: Kolanus, Waldemar
TITLE OF INVENTION: TARGETED CYTOLYSIS OF HIV-INFECTED
TITLE OF INVENTION: CELLS BY CHIMERIC CD4 RECEPTOR- BEARING CELLS
                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Clark & Elbing LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Elbing, Karen L
REGISTRATION NUMBER: 35,238
REFERENCE/DOCKET NUMBER: 00786/247001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-428-2200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: 02-AUCLASSIFICATION: 51
COMPUTER: IBM CONTROL OPERATING SYSTEM:
                                                                                                                 CITY: Boston
                                                                                                                   ADDRESSEE: Clar & _____
STREET: 176 Federal Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS:
                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                         52 NITWFKDGK 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 NLTWYRESK 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4; Conservative
                                                                    02110
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linear
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02-AUG-1994
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 36; DB 2; Pred. No. 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 182;
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Best Local Similarity
~+~hes 4; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PCT-US92-01785-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 25, Application PC/TUS9201785
Sequence 25, Application PC/TUS9201785
GENERAL INFORMATION:
APPLICANT: The General Hospital Corporation
TITLE OF INVENTION: Redirection of Cellular Immunity by Receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEX:
INFORMATION FOR SEQ ID NO:
             PRIOR APPLICATION NUMBER: 07/665,961
APPLICATION NUMBER: 07/665,961
FILING DATE: March 7, 1991
ATTORNEY/AGENT INFORMATION:
NAME: Clark, Paul T.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 00786/119002
                                                                                                                                                                                           COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/2 Model 50Z or 55SX
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: Wordperfect (Version 5.0)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 07/847,566
FILING DATE: 06-MAR-1992
APPLICATION NUMBER: 07/665,961
FILING DATE: 07-MAR-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEPHONE: 617-428-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/09/218,950
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                             APPLICATION NUMBER: POFILING DATE: 19920306 CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Fish a ... street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 02-AUGAPPLICATION NUMBER: FILING DATE: 14-FEI
                                                                                                                                                                                                                                                                                                            ZIP: 02110-2804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             52 NITWFKDGK 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: 617-428-7045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Elbing, Karen L
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/0 FILING DATE: 02-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH:
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44.4%;
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TELEFAX: (01.,
TELEX: 200154
INFORMATION FOR SED ID NO: 25:
SEQUENCE CHARACTERISTICS:
LENGTH: 182 anino acids
TYPE: AMINO ACID
TYPE: AMINO ACID

; MOLECULE TYPE: amino acid PCT-US92-01785-25

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PCT-US95-00454-25
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 25, Application PC/TUS9500454 GENERAL INFORMATION:
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 57.1%;
Best Local Similarity 44.4%;
Matches 4; Conservative
                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: CLAIK, PAULT.
REGISTRATION NUMBER: 30,162
REFERENCE/DOCKET NUMBER: 0078
TELECOMMUNICATION INFORMATION:
TELEPHONE: (617) 542-8906
TELEPAX: (617) 542-8906
                                                                                                                                                                           TELEFAX: (617) 542-8906
TELEX: 200154
INFORMATION FOR SEQ ID NO: 25:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Seed, Brian et al.
TITLE OF INVENTION: Targeted Cytolysis of HIV-Infected
TITLE OF INVENTION: Cells by Chimeric CD4 Receptor-
TITLE OF INVENTION: Bearing Cells
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 225 Franklin Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
ZIP: 02110-2804
ZIP: 02110-2804
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM PS/Z Model 502 or 553X
OPERATING SYSTEM: IBM P.C. DOS (Version 3.30)
SOFTWARE: Wordperfect (Version 5.0)
CURRENT APPLICATION NUMBER: PCT/US95/00454
                                                                                                  MOLECULE TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/665
FILING DATE: March 7, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: (
FILING DATE: March 6,
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        שביני: Boston
STATE: אא
                                                                                                                       LENGTH: 182 aminc TYPE: amino acid TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        52 NITWFKDGK 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 NLTWYRESK 11
                                                                                                                                                         182 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER: 07/847,566
March 6, 1992
57.18;
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                                                                                                                                                                                                                                                                                                       00786/247001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 36; DB 5; Length 182; Pred. No. 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1; Indels
                  Length 182;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
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Search completed: April 21, 2002, 10:16:00 Job time: 285 sec

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RESULT 25
5457037-5
FALENT NO. 5457037
; PATCH NO. 5457037
; PATCH NO. 5457037
; APPLICANT: TOGNONI, ANGELO; CARRERA, PAOLO; CAMERINI, BARBARA; GALLI, GUIUCANC: LUCCHESS, GIUSEPE; GRANDI, GUIUC); I GENNARO, CARLO TITLE OF INVENTION: CLONING OF THE GENE CODING THE ISOAMYLASE; ENZYME AND ITS USE IN THE PRODUCTION OF SAID ENZYME
INUMEER OF SEQUENCES: 7
COURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/1,797
FILING DATE: 08-JAN-1993
PRIOR APPLICATION NUMBER: 749,621
FILING DATE: 19-AUG-1991
APPLICATION NUMBER: 224,114
FILING DATE: 25-JUL-1988
                                                      Query Match
Best Local Similarity
6; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PATHON NO. 5457037

PATHON NO. 5457037

PATHON NO. 5457037

ANGELO; CARRERA, PAOLO; CAMERINI, BARBARA;

GALLI, GIULIANO; LICCHESS, GIUSEPPE; GRANDI, GUIDO; DI GENNARO, CARLC

TITLE OF INVENTION: CLONING OF THE GENE CODING THE ISOAMYLASE;

ENZYME AND ITS USE IN THE PRODUCTION OF SAID ENZYME
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5457037-3
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FILING DATE: 08-JAN-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 7
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         640 GSQLTWYQPS 649
641 GSQLTWYQPS 650
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FILING DATE: 19-AUG-1991
APPLICATION NUMBER: 224,114
FILING DATE: 25-JUL-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 60.0%; ses 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                52 NITWFKDGK 60
                                     1 GMNLTWYRES 10
                                                                                                                                                                                           LENGTH: 751
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                                                                            Conservative
                                                                          57.1%; Score 36; DB 6; 60.0%; Pred. No. 1.4e+02; tive 1; Mismatches 3
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    Mismatches

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                                                                                                                 DB 6; Length 751;
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